

Ref.	Name	Number	Program System
2.7	Accounts Receivable	5798-CAE	DOS/VS
2.7	Accounts Payable	5798-CAC	DOS/VS
2.8	Admissions System	5798-CCC	DOS/VS, DOS/VSE
2.16	Admissions System	5798-CJW	DOS/VS, OS/VS
2.4	Admissions System, Health Care Support	5798-ASZ	DOS
2.12	Alpha Search Inquiry System - Online Update	5798-CFJ	DOS/VS, OS/VS
2.4	Alpha Search Inquiry System - IMS Interface	5798-AWB	OS
2.8	Appointment Scheduling	5798-CCA	DOS/VS, DOS/VSE
2.4	Assembler Testing	5798-AWJ	DOS/VS
2.11	Author Training (Extended) for ITS	5798-CEX	OS/VS
2.10	Author Training (Basic) for ITS	5798-CEB	OS/VS, DOS/VS, VM/370
2.21	Autocoder to COBOL for CMS (ACCAP/CMS)	5798-CNH	DOS/VS, OS/VS, VM/370
2.14	APL Data Language	5798-CHR	OS/VS, VM/370
2.16	ATMS Batch Backup	5798-CJY	OS/VS
2.29	ATMS II DOS/VS Support of System/6	5798-CTB	DOS/VS
2.25	ATMS II Support for the 6640 Document Printer	5798-CQA	OS/VS
2.28	ATMS II Font Change Commands for the 3800 Prt	5798-CRH	OS/VS
2.24	Bank Comparison Appl for Trend Analysis/370	5798-CPW	OS/VS
2.29	Basic Teller System - Host	5798-CTQ	DOS/VS, OS/VS1
2.29	Basic Teller System - 3600	5798-CXL	DOS/VS, OS/VS1
2.32	BTS - TPNS	5798-CXJ	OS/VS
2.28	Braille Utilities	5798-CRZ	DOS/VS, OS/VS
2.11	Budget Accounting Information System, Online	5798-CEG	DOS/VS
2.3	Burroughs to COBOL	5798-APH	DOS, OS
2.15	Capacity Management Aid	5798-CJB	OS/VS
2.35	Character Extensions for 3800	5798-CZG	OS/VS, DOS/VS
2.7	Check Processing Sort Pattern Generator	5798-CAH	OS/VS
2.13	Check Processing Archive Ret. Sys. 3890 & 3850	5798-CHH	OS/VS
2.30	CPCS Online Test Aid	5798-CWE	OS/VS
2.18	Check Proc Control System (CPCS) Online Adj	5798-CLD	OS/VS
2.22	Check Proc Archive Ret, CICS/VS Interface to	5798-CNW	OS/VS
2.30	CORMES DMS/VS	5798-CTR	DOS/VS
2.2	Coordinate Geometry System, APL	5798-AGF	DOS, OS
2.3	Credit Union System	5798-ALJ	DOS
2.2	Customer Information File (CIF) using CICS	5798-AHX	DOS
2.3	Customer Information File (CIF) using CICS	5798-AMR	OS/VS1
2.4	Customer Infor File (CIF) using IMS DB/DC	5798-AWZ	OS/VS2
2.36	CICS Account Network Management	5798-DAQ	CICS/OS/VS
2.36	CICS Account Network Management	5798-DAT	CICS/DOS/VS
2.9	CICS PLOT	5798-CCG	DOS/VS, OS/VS
2.9	CICS Network Activity Simulator	5798-CCH	DOS/VS, OS/VS, DOS, OS
2.10	CICS Volume Test Facility	5798-CDJ	DOS, OS
2.12	CICS Source Prgm Maintenance		
	... Online Audit & Archive Feature Online II (SPM II)	5798-CFT	DOS/VS, OS/VS, DOS/VS
2.3	CICS Master Terminal, CPU Console	5798-ANK	DOS, OS
2.5	CICS Dynamic Map	5798-AXR	DOS/VS, OS/VS, DOS, OS
2.5	CICS 3270 Simulator	5798-AXC	DOS/VS, OS/VS, DOS, OS
2.7	CICS/MTCS 3270 Screen Format Utility	5798-CBH	DOS, OS
2.11	CICS/MTCS Online Panel Entry Library System	5798-CET	DOS/VS, OS/VS
2.12	CICS/VS Performance Analyzer II	5798-CFP	DOS/VS, OS/VS, DOS/VSE
2.17	CICS/VS Basic Application Programming	5798-CKH	OS/VS
2.16	CICS/VS Dump Reading	5798-CJX	OS/VS
2.15	CICS/VS Dataset Recovery Facility	5798-CJF	DOS/VS, OS/VS
2.27	CICS/VS Form. Trans. Dump (online)	5798-CQY	DOS/VS, OS/VS
2.17	CICS/VS Online Bill of Materials	5798-CKP	DOS/VS
2.32	CICS/VS Maps Conversion to 3790 Panels	5798-CXB	DOS/VS, OS/VS, VM/370
2.25	CICS/VS MVS Peer Address Spaces	5798-CQE	MVS
2.6	CMS Sort for VM/370	5798-BDW	VM/370
2.16	CMSERVICE	5798-CJZ	VM/370
2.1	COPICS Bill of Material Batch Utilities	5785-GAC	DOS/VS/VSE, VS1, MVS
2.1	COPICS Bill of Material Online	5785-GAA	DOS/VS/VSE, VS1, MVS
2.1	COPICS Inventory Acctg.	5785-GAE	DOS/VS/VSE, VS1, MVS
2.1	COPICS Prod. Cost Cal.	5785-GAD	DOS/VS/VSE, VS1, MVS
2.35	COPICS Inv. Plan. & Forecasting	5798-CZF	DOS/VS/VSE, VS1, MVS
2.1	COPICS Adv. Func. Mat. Req. Plan.	5785-GAF	DOS/VS/VSE, VS1, MVS
2.31	COPICS Shop Order Release	5798-CWJ	DOS/VS/VSE, VS1, MVS
2.35	COPICS Fac. Data Control	5798-CZH	DOS/VS/VSE, VS1, MVS
2.32	COPICS Routing Data Control	5798-CXE	DOS/VS/VSE, VS1, MVS
2.18	COBOL Interactive Debug Training Course	5798-CKX	OS/VS
2.34	COBOL Payroll Mgmt. System	5798-CYP	DOS/VS
2.4	Data Compression/Expansion	5798-ATB	DOS, OS
2.33	Data Set Editor	5798-CXQ	OS/VS

Ref.	Name	Number	Program System
2.19	Direct Access Storage Device	5798-CLQ	OS/VS
2.8	Disk Files, Extended Sequential	5798-CBN	DOS/VS
2.29	DASD Seek Simulator	5798-CTD	OS/VS
2.14	DASD Space Utilization Analysis	5798-CHW	DOS/VS
2.4	DASD Device Independence Open (DI-OPEN)	5798-AWH	DOS/VS
2.4	Enhancement feature	5798-AWH	DOS/VSE
2.34	DL/I Fast Scan Utility	5798-CYJ	DOS/VS
2.7	DL/I Programming Course (Basic)	5798-CBA	DOS/VS, OS/VS
2.11	DL/I Programming Course (Advanced)	5798-CFC	OS/VS
2.20	DL/I DOS Version 2Bill of Mat. Sys.	5798-CLY	DOS/VS
2.28	DMS/VS DL/I Man. Func.	5798-CRY	DOS/VS
2.2	DOS to OS Assembler Macro Conversion Aid	5798-AFL	OS
2.13	DOS DASDI JCL	5798-CHA	DOS/VS
2.7	DOS/DITTO Extensions	5798-CAF	DOS/VS
2.4	DOS/DITTO	5798-ARN	DOS
2.34	ETSS-II Batch Lib. Int. to .. POWER/VS	5798-CYZ	DOS/VS
2.34	Entry Time Sharing Sys II (ETSS/II)	5798-CYY	DOS/VS
2.13	Entry Time Sharing Sys, Terminal Control for	5798-CGC	DOS/VS
2.34	Extended Author Train. for .. Interactive Instructional Sys.	5798-CYQ	OS/VS, DOS/VS
2.20	Extension of 3330/3340 Data Set	5798-CNA	DOS/VS
2.13	EPIC:FAST - Instructor Generated Test	5798-CGJ	DOS/VS
2.24	File Cabinet Option	5798-CPY	MVS
2.12	Financial Planning System, APL/CMS	5798-CFX	VM/370
2.6	Financial Planning System, APL	5798-BDE	OS
2.32	Financial Planning System - TSO	5798-CXP	OS/VS2
2.25	Financial Information System .. BACIS	5798-CQF	OS/VS
	.. ONLINE BACIS	5798-CRW	OS/VS
2.8	Fleet Data Base Reporting System	5798-CBW	DOS/VS
2.17	Gen Data Area Monitor and Display Prog.	5798-CKK	OS/VS
2.23	Gen Performance Analysis Reporting Sys (GPAR)	5798-CPR	VS1, SVS, MVS
2.9	General Ledger and Financial Accounting	5798-CCZ	DOS/VS
2.11	Generalized Data Compare	5798-CEQ	OS/VS
2.26	Gen Trace Fac Perf Analysis	5798-CQQ	OS/VS
2.31	Graphic One-line Diagram Display	5798-CWX	VM/370, CMS, MVS, TSO
2.2	Graphs and Histograms, APL	5798-AGL	DOS, OS
2.23	Graphical Displays - CICS/VS	5798-CPJ	DOS/VS, OS/VS
2.4	GE-415 COBOL to COBOL	5798-ASY	DOS
2.26	GIS/VS 3270 Formatting Aid	5798-CQN	OS/VS
2.2	Honeywell 200 Series COBOL to COBOL	5798-AGC	DOS
2.17	HASP-JES2 Spool Transfer Program	5798-CKJ	OS/VS
2.25	HDAM Sequential Randomizer Generator	5798-CQG	OS/VS2
2.32	HDAM Seq Rand. Gen. Extensions	5798-CXN	OS/VS
2.21	Incident Reporting and Tracking	5798-CNP	DOS/VS
2.9	Integrated Financial System .. System/370	5798-CCL	DOS/VS
	.. Demand Deposit Acctg.	5798-CCN	DOS/VS
	.. Installment Loan Acctg.	5798-CCP	DOS/VS
	.. Savings Acctg.	5798-CCQ	DOS/VS
2.10	Interactive Training Sys, Batch Input Edit for	5798-CEF	OS/VS
2.16	Interactive Debug Facility	5798-CKF	DOS/VS
2.1	Interactive PROJACS	5785-DAC	DOS/VS
2.32	Interactive Routing Data Control	5798-CXE	DOS/VS
2.18	Intro to TSO	5798-CKT	OS/VS, DOS/VS
2.12	Inventory Forecasting and Replenishment Mod	5798-CFH	DOS/VS, OS/VS, DOS/ VSE
2.32	Inventory Forecasting and Rep. Mod. - Allocation	5798-CXG	DOS/VS, OS/VS, DOS/ VSE
2.10	Investment Advisory Package	5798-CDQ	DOS/VS
2.21	IMS Availability Reports	5798-CNN	OS/VS
2.13	IMS DC Programming Course	5798-CGX	OS/VS
2.5	IMS Dictionary System	5798-BBA	OS
2.33	IMS Fast Reorganization Reload	5798-CXT	OS/VS
2.29	IMS Fast Scan Utility	5798-CTP	OS/VS
2.18	IMS History Reporting System	5798-CLB	OS/VS
2.19	IMS Job Development System II (IMSJDSII)	5798-CLP	OS/VS
2.14	IMS Mon Sum and Sys Ana Prog II (IMSASAP II)	5798-CHJ	OS/VS
2.19	IMS Master Terminal Operator Assist Facility	5798-CLK	OS/VS
2.18	IMS/VS Message Format	5798-CKY	DOS/VS, OS/VS, VM/370
2.31	IMS/VS 3790 Outboard Formatter .. 3790 Program	5798-CWY	OS/VS
	.. Host Program	5798-CRD	OS/VS
2.26	IMSPARS	5798-CQP	OS/VS
2.16	IMS/VS Bill of Material Sup.	5798-CKC	OS/VS
2.20	IMS/VS Local Copy II	5798-CLZ	IMS/VS-V1.5
2.30	IMS/VS Time Initiated Input Fac	5798-CWF	OS/VS

Ref.	Name	Number	Program System
2.20	IMS/VS Virtual Storage Analysis (IMSVSAP)	5798-CNC	OS/VS
2.35	Installation Management Documentation Aid	5798-CZW	OS/VS
2.34	ISAM - DL/I Bridge	5798-CYT	DOS/VS
2.14	Justice Data Base	5798-CHP	DOS/VS, OS/VS, VM/370
2.2	JCL Device Dep. Para. Con/Replace (DDPREP)	5798-AJU	OS
2.2	Lease vs Purchase Anal of Capital Expenditures	5798-AJK	DOS, OS
2.17	Loader	5798-CKG	DOS/VS
2.16	LEARN II Operator Training for ATMS	5798-CJR	DOS, OS
2.11	Manpower Management	5798-CEY	DOS/VS, OS/VS
2.20	Material Requirements Planning for DL/I DOS/VS	5798-CNF	DOS/VS
2.27	Enhancements	5798-CRA	DOS/VS
2.6	MICR Fine Sort for S/370	5798-BCN	DOS/VS
2.22	MVS/TSO VTAM Data Set Print	5798-CPF	MVS
2.27	MVS Secondary Operator Fac.	5798-CRE	MVS
2.3	NCR Century to COBOL	5798-APG	DOS, OS
2.36	Network Error Management Facility	5798-DAW	CICS/OS/VS, CICS/DOS/VS
2.35	Network Field Edit & Replacement	5798-CZD	DOS/VS, DOS/VSE
2.35	Network Performance Analyzer - Host	5798-CZR	OS/VS
2.35	Network Performance Analyzer - Controller	5798-CZT	OS/VS
2.30	Online Stores Inventory	5798-CTT	DOS/VS
2.8	Order Communications System Extension	5798-CCD	DOS/VS
2.5	Order Communications System	5798-AYG	DOS
2.13	OS Admissions System	5798-CGF	OS/VS
2.15	OS JCL Training (Basic)	5798-CJC	OS/VS
2.13	OS Patient Registration System	5798-CGE	OS/VS
2.9	OS/DITTO Extensions	5798-CDA	OS
2.3	OS/DITTO	5798-ARD	OS
2.33	OS/VS Data Set Editor	5798-CXQ	OS/VS
2.8	Patient Registration System	5798-CCB	DOS/VS, DOS/VSE
2.4	Patient History System, Health Care Support	5798-ATR	DOS, OS
2.8	Payroll Management System	5798-CBR	DOS/VS
2.9	Pharmacy Inventory Control	5798-CCF	DOS/VS, DOS/VSE
2.8	Pharmacy Order Entry	5798-CCE	DOS/VS, DOS/VSE
2.5	Pharmacy Inventory Control System	5798-AZJ	DOS
2.5	Pharmacy Order Entry and Scheduling	5798-AXQ	DOS
2.21	Problem Tracking, Online	5798-CNJ	OS/VS
2.29	Prgm Function Key Sim. for SPF-II	5798-CTF	OS/VS2
2.21	Program Validation Ser (PVS) under CICS/VS	5798-CNG	DOS/VS
2.28	PL/I Program	5798-CRJ	DOS/VS, OS/VS, VM/370
2.10	POWER/VS Cost and Performance Analysis	5798-CDG	DOS/VS, DOS/VSE
2.23	POWER/VS, Console Spooling under	5798-CPQ	DOS/VS
2.22	POWER/VS RJE Controlled Access Monitor	5798-CPH	DOS/VS, DOS/VSE
2.30	PSG II to PLANCODE Conv.	5798-CWB	DOS/VS, OS/VS
2.33	Print Load Analyzer	5798-CXY	OS/VS
2.28	Purchase vs Lease under PLANCODE/I	5798-CRN	DOS/VS, OS/VS
2.33	RACF Productivity Aid	5798-CYF	MVS
2.2	RCA COBOL to COEOL	5798-AHT	DOS, OS
2.10	RPG II Analysis and Documentation Aid	5798-CDL	DOS/VS
2.32	Routing Transit Check Digit	5798-CXD	DOS, OS, OS/VS, DOS/VS
2.4	Source Statement Library Maintenance	5798-AWD	DOS
2.19	Structured Programming Macros	5798-CLF	DOS/VS, OS/VS
2.17	Supermarket Cashier Assignment System	5798-CKQ	DOS/VS
2.29	SLSS Control	5798-CTE	OS/VS
2.32	SNA/RJE Print Output Analysis	5798-CXH	OS/VS
2.36	System Log Display and Search	5798-DAL	OS/VS
2.34	System/370 ANS COBOL Conversion Aid .. for NCR NEAT/3	5798-CZC	DOS/VS
2.33	System/370 Application-wide COBOL Data-name .. Cross Reference (DOS/VS)	5798-CYG	DOS/VS
2.33	System/370 Application-wide COBOL Data-name .. Cross Reference (OS/VS)	5798-CXW	
2.3	System/370 CIPS to DOS	5798-BDA	DOS
2.34	System/370 Host for 3630/3600 Bulk Data Trans.	5798-CYL	OS/VS
2.19	System/370 VS BASIC Conversion	5798-CLH	OS/VS, DOS/VS
2.25	System/3 to System/370 Screen	5798-CQH	DOS/VS, DOS/VSE
2.25	System/3 OCIL to System/370 DOS/VS JCL	5798-CQJ	DOS/VS, DOS/VSE
2.7	System/3 RP3 II to System/370 RPG	5798-CAA	DOS/VS
2.23	SMF Problem Program Activity Report Program	5798-CPP	MVS
2.21	STAIRS to ATMS Document Transfer	5798-CNT	OS/VS
2.33	TCAM Network Definition, Automatic	5798-CYH	OS/VS
2.30	TPNS Log Format	5798-CTX	OS/VS
2.24	TPNS Script Generator	5798-CPZ	OS/VS
2.26	Teller Statistics Subsystem	5798-CQL	DOS/VS, OS/VS1
2.3	Teller Control System (OS)	5798-ANH	OS

\* For new users.

Ref.	Name	Number	Program System
2.5	TSO Command Processor	5798-AYF	OS/VS2
2.18	TSO Effectively, Using	5798-CKW	OS/VS
2.33	TSO/JES2 Batch Display Fac.	5798-CYE	MVS
2.20	TSO Programming Control Facility II	5798-CLW	MVS
2.6	TSO/VS2 Programming Control Facility	5798-BBJ	OS/VS2
2.31	Trend Analysis/370 (CICS/VS)	5798-CWQ	OS/VS
2.2	UNIVAC 9300 COBOL to COBOL	5798-AHP	DOS
2.1	Vehicle Maintenance and Cost Analysis	5798-AAG	DOS
2.15	VIDEO/370 Online Status Display	5798-CJA	DOS/VS, OS/VS
2.15	VIDEO/370 Reverse Extract/Offline Data Entry	5798-CJP	OS/VS
2.15	VIDEO/370 Reverse Extract/Offline Data Entry	5798-CJG	DOS/VS
2.5	VIDEO/370 Format, Online Preparation of	5798-BAC	DOS, OS
2.33	VM/CMS Library Maintenance ... & SPMOL-II Simulator	5798-CYA	VM/CMS
2.24	VM/370 Performance Monitor Analysis	5798-CPX	VM/370
2.5	VM/370 Control and Accounting Programs	5798-AYP	DOS/VS, OS/VS
2.34	VSAM Operations Utility	5798-CYR	DOS/VS, DOS/VSE
2.15	VSAM Training (Basic) for DB/DC Users	5798-CJE	OS/VS
2.26	VS APL Financial Planning Sys.	5798-CQT	VM/370 CMS
2.29	VSPC Full Screen Editor	5798-CTG	OS/VS, DOS/VS
2.7	VS1 Utilization Monitor	5798-CAK	OS/VS1
2.29	VTAM Configurator and Generation Aid	5798-CTL	DOS/VS
2.21	VTAM Interface to VIDEO/370	5798-CNK	OS/VS
2.30	VTAM Performance Analysis Rep	5798-CTW	OS/VS
2.2	Zeros and Integrals, APL	5798-AGJ	DOS, OS
2.6	1130 FORTRAN Commercial Subroutines for DOS/VS	5798-BCT	DOS/VS
2.9	1400 Compatibility Access Routine	5798-CDB	DOS/VS
2.6	1400 Files - Sort	5798-BDH	DOS/VS, DOS/VSE
2.1	2311 to 2314/19 DASD Device Ind Routines	5798-ADT	DOS
2.3	2311/14/19 to 3330 DASD Device Ind Routines	5798-ALK	DOS
2.2	2927 - Tape-to-Printer Utility Program	5798-AKH	BPS
2.7	3270 Operator's Training Course under ITS	5798-CAZ	OS/VS
2.31	3276/3278 Operator Train	5798-CWZ	DOS/VS, OS/VS, VM/CMS
2.36	3277 Storage Tube & Plotter Simulator	5798-DAG	TSO/MVS, CMS
2.6	3330 - Device Support Extended	5798-BCE	OS
2.3	3330/3340 Data Set	5798-AMN	DOS
2.22	3540 - Diskette Utility II	5798-CNZ	DOS/VS, DOS/VSE
2.11	3600 Support	5798-CEK	DOS/VS
2.10	3600 - Finance Appli Program for System/370	5798-CDX	DOS/VS, OS/VS
2.18	3600 - Statistics and Message Log Reporting	5798-CLC	DOS/VS, OS/VS, DOS/VSE
2.20	3600 - Hierarchical Monitor System (HMS3600)	5798-CLT	DOS/VS, OS/VS
2.18	3600 - Data Entry	5798-CLA	DOS/VS, OS/VS
2.19	3600 - Finance Application Program II	5798-CLE	DOS/VS, OS/VS, DOS/VSE
2.1	3600 Prgm Customizer	5785-KAA	OS/VS
2.1	3600 Prgm Customizer	5785-KAB	DOS/VS
2.28	3600 Remote Con. Fac.	5798-CRR	DOS/VS, OS/VS
2.23	Extended Appl. Sup.	5798-CPT	DOS/VS, DOS/VSE
2.26	3614 - Usage Reporting System	5798-CQK	DOS/VS, OS/VS1, DOS/VSE
2.34	3630/3600 Bulk Data Trans.	5798-CYK	OS/VS
2.36	3650 Pharmacy Application	5798-DAK	OS/VS, DOS/VS
2.36	3650 Plant Monitoring and Control Driver	5798-DAH	DOS/VS, VS1, MVS
2.6	3650 - Retail Register Audit	5798-BDK	DOS/VS
2.35	3650 Simultaneous Printing of Observed Trans.	5798-CZK	DOS/VS
2.30	3650 - Store Acctg. Report	5798-CWG	DOS/VS
2.15	3660 - Supermarket Batch Communication:	5798-CJQ	DOS/VS, OS/VS
2.25	3660 - Advanced Sched Environment for CICS/VS	5798-CQC	DOS/VS, OS/VS
2.15	370X - Trace Editor (3704-3705)	5798-CHZ	DOS/VS, OS/VS
2.3	3735 - Communications Utility	5798-ALG	DOS, OS
2.13	3741 - Sort	5798-CHB	3741
2.34	3760 Batch Transfer Program Installation Aid	5798-CYN	DOS/VS
2.25	3760 - Batch Data Transfer under CICS/VS	5798-CQB	DOS/VS
2.18	3770 - Communications Utility	5798-CKZ	DOS/VS, OS/VS
2.22	3770 - Sort	5798-CNY	3770 Macros
2.31	3770 Supervisor Assembler	5798-CWH	DOS/VS, OS/VS, VM/370
2.22	3770P - Batch Trans. Services	5798-CNX	DOS/VS, OS/VS
2.22	3770/3790 PVS Data Set Test Support	5798-CPG	DOS/VS, OS/VS
2.27	3770/3790 - Assembler Listing Post Editor	5798-CQZ	OS/VS, DOS/VS, VM/370
2.33	3777-2 POWER/VS	5798-CXR	DOS/VS
2.35	3790 Data Entry Prgm for	5798-CZL	OS/VS, DOS/VS
2.35	... MASTERCHARGE VISA	5798-CZQ	OS/VS, DOS/VS
2.27	3790 Interactive File Maintenance	5798-CRF	DOS/VS, OS/VS, VM/370
2.12	3790 - Batch Transmission Services	5798-CGB	OS/VS
2.16	3790 - Sort	5798-CKA	DOS/VS, OS/VS
2.22	3790 - Utility Program	5798-CPA	3790 Macros
2.28	3790 - Key Sequential File Macros	5798-CRG	DOS/VS, OS/VS, VM/370
2.21	3790 - Query	5798-CNR	OS/VS, DOS/VS

Ref.	Name	Number	Program System
2.1	3800 - Plotting Facility	5785-AAA	OS/VS
2.17	3800 - BOLDFACE Print Program	5798-CKR	OS/VS
2.23	3800 - FORMAT/3800	5798-CPN	OS/VS
2.36	3800 - FORMAT/3800 II	5798-DAC	OS/VS
2.27	3800 - Business Graphing	5798-CRB	OS/VS
2.31	3800 Forms Utility	5798-CWW	OS/VS
2.28	3800 Interactive Character Design		
	.. ATMS II	5798-CRK	OS/VS
	.. TSO	5798-CTJ	TSO
	.. CMS	5798-CTH	VM/CMS
	.. VSPC	5798-CTK	OS/VS
2.32	3800 Report Format & Seq. Program	5798-CXF	OS/VS
2.27	3890 Online Fine Sort	5798-CRC	OS/VS
2.6	3890 OS/VS Offline Fine Sort Enhance	5798-BDY	OS/VS
2.29	3800 UPC Print	5798-CTA	OS/VS
2.7	3890 - Programming Testing Aid	5798-CBG	OS/VS, DOS/VSE
2.26	3890 DOS/VS Cycle Sort	5798-CQX	DOS/VS
2.11	3890 - Sort, Offline	5798-CFD	DOS/VS
2.19	3890 - On-Us Editing	5798-CLJ	OS/VS
2.6	3890 - Sort, Offline Fine	5798-BDY	OS/VS
2.31	3890 - Sort, Online Fine	5798-CWR	DOS/VS
2.6	3890 - Application/Installation Support	5798-BDC	DOS/VS
2.35	8100/DPCX 3790 Dist. Entry/Query	5798-CZE	OS/VS, DOS/VS
2.36	8100/DPCX 3790 Sort/Merge	5798-DAF	OS/VS, DOS/VS

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**IBM 3800 PLOTTING FACILITY****5785-AAA**

This FDP, written in FORTRAN, allows the creation of precise drawings and graphs on the IBM 3800 Plotting Subsystem. It uses simple commands, similar to those used for drawings on plotting devices.

The objective of the FDP is to produce on an IBM 3800 Printing Subsystem more precise drawings and graphs than have been possible using periods or asterisks on conventional printers.

**Highlights**

- Ease of use - the common interfaces to the plotting subroutines are identical, from a parameter standpoint, to those of available plotter packages.
- Higher quality graphs - the graphics output are of a quality acceptable for final copy in graphs not requiring a high degree of resolution, such as business trend analysis. In addition, it can be used to test programs which produce graphs requiring a high degree of resolution, such as engineering drawings.

Notice GB21-2154 and PDOM SB21-2155.

**INTERACTIVE PROJACS****5785-DAC**

This FDP is a supplement to the Project and Analysis Control System (PROJACS) program product (5746-XP1). It supports all four PROJACS processors (main, network, preparation, resource allocation, and cost evaluation).

The FDP provides users with immediate access from their working place via a data display station to the data processing system. The user is able to continuously change, update, and revise the networks by passing back and forth between input and output.

Notice GB21-2447, PDOM SB21-2448, and systems guide LB21-2449.

**COPICS BILL OF MATERIAL ONLINE****5785-GAA**

The COPICS Bill of Material Online application program brings the data base directly to user departments. Using IBM 3270 display terminals, users can maintain the product definition data base as well as make inquiries against it.

The program automatically communicates bill of material changes to the Advanced Function MRP application program (5785-GAF) to recalculate the material plan on items and assemblies modified or added.

Notice GB21-2439 and PDOM SB21-2440

**COPICS BILL OF MATERIAL BATCH UTILITIES****5785-GAC**

The COPICS Bill of Material Batch Utilities application program provides the user with utilities that load, unload, and perform basic retrievals against the COPICS product definition data base. This application program is to be used in conjunction with COPICS Bill of Materials Online (5785-GAA).

Notice GB21-2437 and PDOM SB21-2438

**COPICS PRODUCT COST CALCULATIONS****5785-GAD**

The COPICS Product Cost Calculations application program is a tool for analyzing and simulating the impact of changing component material, labor, and burden costs. Using an IBM 3270 display terminal, the user can change cost factors or simulate cost factor changes and immediately review the impact on the end item's profitability.

Notice GB21-2441 and PDOM SB21-2442.

**COPICS INVENTORY ACCOUNTING****5785-GAE**

The COPICS Inventory Accounting application program addresses the administrative or record keeping aspects of inventory control. The application program supports online entry, editing and processing of a full compliment of COPICS inventory transactions with batch transaction history and audit trails.

The program automatically communicates unplanned inventory transactions to the Advanced Function MRP application program (5785-GAF) to replan those items in the next selective replanning run.

Notice GB21-2443 and PDOM SB21-2444.

**COPICS ADVANCED FUNCTION MATERIAL REQUIREMENTS PLANNING****5785-GAF**

The COPICS Advanced Function MRP application program is a tool for managing dependent demand inventories. The application program enables the user to develop a time-phased material plan by date and to maintain that plan by processing only the changes to the plan (selective replanning).

Notice GB21-2445 and PDOM SB21-2446.

**THE 14-DIGIT COMPUTATIONAL FIELDS FOR PROGRAM CUSTOMIZER/3600****5785-KAA FOR OS/VS AND****5785-KAB FOR DOS/VS**

These FDPs extend the Program Customizer for the 3600 (PC/3600) (5740-F11 for OS/VS and 5746-F11 for DOS/VS). With the FDP, PC/3600 can handle computational numbers and identifying numbers containing up to 14 digits. These numbers have a 9-digit limit in the program product. The FDP permits the user to specify the maximum permissible size for these numbers within the range of 9 to 14 digits. Multiplicands and dividends may extend up to the specified limit, but their multipliers and divisors are extended to 7 significant digits.

Availability notice GB21-2320, PDOM SB21-2321, and systems guide LB21-2322.

**VEHICLE MAINTENANCE AND COST ANALYSIS****5798-AAG**

This FDP provides programs which assist in controlling the maintenance cost of equipment by processing vehicle information in a manner that facilitates the measurement and evaluation of equipment performance.

Control of equipment maintenance costs requires an organized system of facts, measurements, and related evaluation criteria. The objective of this system is to provide the necessary figures for:

Improved efficiency of vehicle operations by providing management information from actual operating, maintenance, and depreciation cost data.

Reduction of the overall maintenance expense, unscheduled maintenance, and breakdowns by producing an inspection listing and a controlled preventive maintenance schedule.

Better selection criteria of equipment, components, and accessories by providing cost-per-mile reports.

Notice GB21-0019, PDOM SB21-0020, and Systems Guide LB21-0021.

**DOS 2311-2314/19 DASD DEVICE INDEPENDENCE ROUTINES****5798-ADT**

Replacement of 2311 DASD with 2314 DASD can be a major effort and expense for many DOS users. All programs must be recompiled, changing references from 2311 to 2314 DASD. Some users may no longer have up-to-date source decks for their programs. Disk Extents must be changed to maintain cylinder boundary alignment. Finally, permanent files must be copied from 1316 to 2316 disk packs. This

FDP eliminates the need to change and recompile programs.

Notice GB21-0238, PDOM SB21-0239, and Systems Guide LB21-0240.

**CONVERSION AID:  
DOS TO OS ASSEMBLER MACRO  
5798-AFL**

This FDP is designed to assist medium to large-size DOS installations in moving into information systems, expanded multiprogramming, telecommunication, and time sharing. Their growth in those areas points to the extensive facilities of OS; however, they face a difficult, time-consuming task in converting DOS Assembler Language programs to OS, a task that this FDP is designed to facilitate.

Notice GB21-0334, PDOM SB21-0335, and Systems Guide LB21-0336.

**CONVERSION AID:  
IBM ANS COBOL FROM HONEYWELL 200 SERIES COBOL  
5798-AGC**

This FDP is a series of programs and procedures which will assist in the conversion of Honeywell 200 series (MOD 1 or OS 200) programs to IBM ANS COBOL.

Notice GB21-0387, PDOM SB21-0388, and Systems Guide LB21-0389.

**APL COORDINATE GEOMETRY SYSTEM  
5798-AGF**

This FDP is designed to solve coordinate geometry problems interactively at a terminal. It is written in APL to run with APL Program Products.

The FDP is based on ICES COGO, but the syntax has been modified to a form more appropriate for interactive use. It provides for points, lines, circular arcs, transition spirals, areas, and parabolic curves in three dimensions. Points can be plotted on output.

The FDP is for use by surveyors, civil engineers, urban planners, or any others who need to solve on the large class of geometric problems it handles.

Notice GB21-0399, PDOM SB21-0400, and Systems Guide LB21-0401.

**ZEROS AND INTEGRALS IN APL  
5798-AGJ**

This FDP is intended for scientists, engineers, and others who need to find roots of equations and compute integrals. Used interactively at a terminal, it is written in APL to run with APL Program Products.

Notice GB21-0408, PDOM SB21-0409, and Systems Guide LB21-0410.

**GRAPHS AND HISTOGRAMS IN APL  
5798-AGL**

This FDP produces curves and barcharts at a typewriter terminal. A wide range of options is provided. Several curves can be plotted on one graph. The user chooses size, position, orientation, linear or logarithmic scale and printing of axes, borders, or grids. All the computational power of APL is available for generating the data to be plotted, and the data can be stored using the APL library system.

The package is useful in a variety of fields, including engineering, science, descriptive geometry, demography, urban planning, budgeting, and market analysis.

Notice GB21-0414, PDOM SB21-0415, and Systems Guide LB21-0416.

**CONVERSION AID:  
IBM ANS COBOL FROM UNIVAC 9300 COBOL  
5798-AHP**

This FDP is a series of programs and procedures to assist in the conversion.

Notice GB21-0490, PDOM SB21-0491, and Systems Guide LS21-0492.

**CONVERSION AID:  
IBM ANS COBOL FROM RCA COBOL  
5798-AHT**

This FDP is a series of programs and procedures to assist in the conversion.

Notice GB21-0493, PDOM SB21-0494, and Systems Guide LB21-0495.

**CUSTOMER INFORMATION FILE  
5798-AHX**

This FDP provides a multi-purpose Customer Information File that combines all customer descriptive data into a centralized pool of information for a bank. Access to the file can be from online terminals via name or account number, or from the various accounting application programs being run offline. The online program operates under the DOS Standard CICS Program Product 5736-XX7.

Notice GB21-0505, PDOM SB21-0506, Terminal Operators Manual SB21-1305, and Systems Guide LB21-0507.

**LEASE VS PURCHASE ANALYSIS OF CAPITAL EXPENDITURES  
5798-AJK**

This FDP assists financial executives in determining whether to purchase or lease capital equipment and, if purchase, in deciding the best method of financing, depreciating, and using tax exclusions. Also, using Return Investment (ROI) and Internal Rate of Return (IRR) methods, they can determine if the acquisition is favorable.

Notice GB21-0541, PDOM SB21-0542, and Systems Guide LB21-0543.

**OS/360/370 JOB CONTROL LANGUAGE DEVICE DEPENDENT  
PARAMETER CONVERSION AND REPLACEMENT (DDPREP)  
5798-AJU**

I/O device replacement can cause considerable operational disruption and JCL conversion costs for an OS/360 or OS/370 customer. When I/O devices are to be upgraded, existing job control language must be altered to take advantage of the performance characteristics of the new device. That alteration is a time-consuming repetitive task that frequently occupies expensive systems talent for extensive periods at considerable cost.

This FDP is designed to minimize the manual effort and costs required to examine and convert large quantities of Job Control Language. DDPREP converts production Job Control Language and procedure libraries to accommodate new I/O device characteristics and data set locations.

Notice GB21-0574, PDOM SB21-0575, and Systems Guide LB21-0576.

**2927 TAPE-TO-PRINTER UTILITY PROGRAM  
5798-AKH**

This FDP enables users to print formatted print tapes on the IBM 2927 Tape-to-Printer with a minimum of communication with the operator.

Notice GB21-0610, PDOM SB21-0611, and Systems Guide LB21-0612.

**COMMUNICATION UTILITY FOR THE 3735  
5798-ALG**

In many application environments, the IBM 3735 Programmable Buffer Terminal must operate off-line. Data is collected in its buffer as the operator enters information through the Selectric II Typewriter where it is held until transmitted to a central computer.

This FDP provides a comprehensive set of communication options designed to collect data from 3735s and return forms description programs and data to the terminal. The utility satisfies many 3735 application communication requirements and facilitates 3735 application implementation. In many cases, installation can be accomplished in a minimum amount of time and at a lower cost than using a tailored system developed by the user. The FDP is written in Assembler Language, using BTAM, is designed to be used under either DOS or OS.

Notice GB21-0671, PDOM SB21-0672, and Systems Guide LB21-0673.

**CREDIT UNION SYSTEM/370  
5798-ALJ**

This FDP provides credit unions with a system of programs which maintain share and loan records by processing transactions to produce the normal accounting and management information reports.

Notice GB21-0677, PDOM SB21-0678, and Systems Guide LB21-0679.

**CONVERSION AID:  
2311/14/19-3330 DASD DEVICE INDEPENDENCE ROUTINES  
5798-ALK**

This FDP is designed to dramatically reduce the time and effort which are generally required to convert to a new DASD device such as the IBM 3330 in a DOS environment.

This is accomplished by providing users with a measure of DASD device independence for their current programs which does not exist in DOS. Using this device independence, they can begin almost immediately upon installation to take advantage of the faster performance and increased capacity of the new device with their existing programs.

Notice GB21-0686, PDOM SB21-0687, and Systems Guide LB21-0688.

**CONVERSION AID:  
DOS 3330 OR 3340 DATA SET  
5798-AMN**

This FDP provides the user with a utility program which copies data sets from one DASD device to a 3330 or 3340. Based on parameters submitted by the user, the utility produces DOS assembler programs which can be compiled and executed to do the actual conversion for each data set; therefore, the total programming effort for file conversion is either eliminated or substantially reduced.

Notice GB21-0740, PDOM SB21-0741, and Systems Guide LB21-0742.

**CUSTOMER INFORMATION FILE (CIF) USING CICS  
5798-AMR**

This FDP provides a multipurpose file (CIF) that combines all customer descriptive data into a centralized pool of information. Information that may be contained in CIF includes names and addresses, all account relationships, personal data, and various marketing and customer control data. The file can include not only data on current and past customers, but also data on prospects, stockholders, contacts, competitors, and undesirable business risks.

Notice GB21-0749, PDOM SB21-0750, and Systems Guide LB21-0751.

**TELLER CONTROL SYSTEM (OS)  
5798-ANH**

This FDP operates under CICS (5734-XX7) to provide an integrated data base/data communications system which supports the functions required to process savings transactions, memo-post DDA transactions, and control the teller monetary position for other transactions using the IBM 2980 terminal system. The IBM 7770 Audio Response System is supported for balance inquiry and memo updating.

Notice GB21-0776, PDOM SB21-0777, and Systems Guide LB21-0778.

**CONVERSION AID:  
DPS TO DOS****5798-BDA (System/370)**

The System/370 FDP executes on the DOS or DOS/VS system so that all of the conversion can be accomplished after the DOS system is installed, or the remaining conversion can be finished.

Notice GB21-1336, PDOM SB21-0784, and Systems Guide LB21-0783.

**PRODUCTIVITY AID:  
CPU CONSOLE AS MASTER CICS TERMINAL  
5798-ANK**

This FDP allows the user to utilize the CPU console as a CICS master terminal, requesting CICS transaction through the console. Also, messages can be sent from any terminal to the CPU console, and CICS error and status messages can be routed to the CPU console.

Notice GB21-0800, PDOM SB21-0801, and Systems Guide LB21-0802.

**CONVERSION AID:  
IBM ANS COBOL FROM NCR CENTURY COBOL  
5798-APG**

This FDP is not merely a language conversion program, but instead is an entire series of programs, subroutines, and procedures designed to address many of the major problems encountered when converting from NCR Century Series COBOL to IBM ANS COBOL.

Notice GB21-0839, PDOM SB21-0840, and Systems Guide LB21-0841.

**CONVERSION AID:  
IBM ANS COBOL FROM BURROUGHS 2500 SERIES COBOL  
5798-APH**

This FDP is not merely a language conversion program, but instead is an entire series of programs, subroutines, and procedures designed to address many of the major problems encountered when converting from Burroughs 2500 Series COBOL to IBM ANS COBOL.

Notice GB21-0836, PDOM SB21-0837, and Systems Guide LB21-0838.

**OS/DITTO  
5798-ARD**

This FDP reduces test time requirements by providing the facility to examine, alter, and modify data files used in both a testing and production environment. It provides the user with ability to access and display a file on any supported device. The Data Control Block (DCB) parameter is not needed or used by OS/DITTO; therefore, the user can quickly and accurately determine the file characteristics, and initiate commands to provide the necessary data to continue testing.

OS/DITTO is a Generalized Utility Program that performs most of the normal card, tape, and disk utility functions, thus eliminating the awkward process of using several different utility programs. It also has a documentation print-out function which complements the reference manuals.

Notice GB21-0857, PDOM SB21-0858, and Systems Guide LB21-0859.

**DOS/DITTO  
5798-ARN**

Written in ALC, this general purpose utility program contains 37 utility functions for unit record, tape and disk input/output units.

Functional utilities are: Tape and Disk Record Scan, Disk and Tape Record Alteration, Disk ID Volume Number Charge, Deblocking and Tape Records when printing, and User Tape Error Correction.

DOS/DITTO is an enhanced version of the Type III program DITTO-360D.00.1.018 and requires a System/360 or System/370 with a minimum partition size of 16K.

Notice GB21-0875, PDOM SB21-0876, and Systems Guide LB21-0877.

**CONVERSION AID:  
IBM ANS COBOL FROM GE-415 COBOL  
5798-ASY**

This FDP is designed to assist in converting GE-415 MTPS COBOL to IBM ANS COBOL. It also has the facility to translate GE-mode tape data files into EBCDIC. The FDP operates under DOS or DOS/VS, but contains a facility to generate COBOL source programs for compilation under OS as well.

Notice GB21-0914, PDOM SB21-0915, and Systems Guide LB21-0916.

**HEALTH CARE SUPPORT: ADMISSIONS SYSTEM  
5798-ASZ**

This FDP uses CICS and is designed to allow the DOS user easy entry into online processing of admissions functions utilizing the IBM 3270 Information Display System. The system is compatible with SHAS (360A-UH-11X). However, other billing systems can be used with slight modification to the Admissions System.

Notice GB21-0935, PDOM 0936, and Systems Guide LB21-0937.

**DATA COMPRESSION/EXPANSION  
5798-ATB**

This FDP allows the user to reduce the DASD space requirements for alphanumeric fields by up to 24% and more readily justify placing a data base online. This space reduction is accomplished by a program subroutine which compresses the alphanumeric data before it is written on external storage. A second subroutine expands the data to its original state for display or printing. These Compress/Expand subroutines are link-edited to the user's program and are executed when needed. The user's program can be written in DOS or OS Assembler Language, COBOL, PL/I, or RPG.

Notice GB21-0938 and PDOM SB21-0939.

**HEALTH CARE SUPPORT: PATIENT HISTORY SYSTEM  
5798-ATR**

This FDP provides for a self-administered online collection of medical history data, using the IBM 3277 or 3275 video display terminal with light pen. Optionally, data can be entered via an 80-column card reader after extraction from offline questionnaires. Patient summaries can be printed immediately at the IBM 3284/3286 remote printer or on high-speed printers at the central computer.

Notice GB21-0963, PDOM SB21-0964, and Systems Guide LB21-0965.

**ALPHA SEARCH INQUIRY SYSTEM/IMS INTERFACE  
5798-AWB**

This FDP extends the facilities and convenience of the Alpha Search Inquiry System program product to the IMS user to provide a conversational, name-oriented, information retrieval system.

Notice GB21-0987, PDOM SB21-0988, and Systems Guide LB21-0989.

**DOS SOURCE STATEMENT LIBRARY MAINTENANCE  
FOR ANS COBOL  
5798-AWD**

This FDP enables the programmer to update the library with the same control cards used to compile the program, thus eliminating the time required to make new control cards and correct errors. Programs can be compiled direct from the source statement library with changes submitted on cards. When the program has been fully tested, the change cards can be used to update the library, providing a final version for later use.

Notice GB21-0999, PDOM SB21-1000, and Systems Guide LB21-1001.

**DOS/VS DASD DEVICE INDEPENDENCE OPEN (DI-OPEN)  
5798-AWH**

This FDP is designed to dramatically reduce the time and effort which are generally required to convert to a new DASD device in a DOS/VS or DOS/VSE environment.

**Enhancement Feature (DI-OPEN)**

This Enhancement Feature (Specify 9534, 9535) provides for execution of the DOS/VS DASD Device Independence Open (DI-OPEN), 5798-AWH, operating under DOS/VSE.

Notice GB21-2460, PDOM SB21-2461, and Systems Guide LB21-1004.

**PRODUCTIVITY AID:  
DOS/VS ASSEMBLER LABEL-TRACE FACILITY  
5798-AWJ**

With this FDP, conceptually similar to COBOL Ready Trace, one of the most time-consuming aspects of program debugging can be reduced substantially - the task of deducing which logic path the processor took through the program. The programmer's source code labels are printed on SYSLIST as the program executes, interspersed with the program's printed output, if any. Tracing can be turned on or off at any time during program execution. It can also be assigned to a separate printer or tape, if desired. When a program has gone into production use, the Trace Facility can be reactivated, or removed from the program altogether. Because the programmer can verify the various program paths taken during test execution, greater reliability may be achieved in the end product.

Notice GB21-1008, PDOM SB21-1009, and Systems Guide LB21-1010.

**CUSTOMER INFORMATION FILE (CIF) USING IMS DB/DC  
5798-AWZ**

This FDP extends the use of the financial institutions' CIF concept to IMS customers. The FDP is written primarily in ANS COBOL and uses the 3270 Information Display System with either 1,920 or 480 character display stations.

Notice GB21-1038, PDOM SB21-1039, Systems Guide LB21-1040, and Terminal Operators Guide LB21-1041.

**PRODUCTIVITY AID:  
CICS/3270 SIMULATOR  
5798-AXC**

This FDP permits testing of CICS/3270 application programs using a sequential terminal. As an extension to the CICS sequential test facility, it accepts simple statements describing the test data and builds 3270 input data streams including all necessary control characters. It also accepts 3270 output data streams, interprets all control information, and prints the stream as it would appear on a real 3270 terminal. Thus, the effort of preparing test data and interpreting test results is significantly reduced. The aid also provides an optional facility for automatic documentation of 3270 screen layouts (outputs generated by CICS Basic Mapping Support). Users can use this aid to fully test application programs prior to installation of 3270 hardware.

Notice GB21-1035 and PDOM SB21-1036.

**HEALTH CARE SUPPORT:  
PHARMACY ORDER ENTRY AND SCHEDULING  
5798-AXQ**

This FDP, based on CICS and the 3270, is designed for use with other members of the Health Care Support family, but can be modified to interface to other software systems.

Notice GB21-1065, PDOM SB21-1066, and Systems Guide LB21-1067.

**PRODUCTIVITY AID:  
CICS DYNAMIC MAP  
5798-AXR**

This FDP provides visibility into the real-time status and composition of an active CICS partition by combining a statistics-gathering capability with its own output writer facility.

These facilities give the user the ability to selectively display and/or log pertinent system statistics. These statistics include parameters which describe the partition composition, fragmentation and its effects, storage utilization by task and system, current and scheduled task activity, the effects of program residence and storage and system performance, and the average transaction rate experienced since system initiation.

While the user may be able to accurately compute the size of the CICS nucleus, it is often difficult to accurately estimate the amount of dynamic free memory storage which should be allocated. By using CICS Dynamic Map, the user can see how various changes in the dynamic free storage area can affect system performance and the utilization of the free memory storage area.

Available optional features include time initiation and memory dumping facilities. This means that the CICS user can gather and print relevant system and application performance statistics while CICS is operating and thereby more quickly determine system performance problems and take appropriate action to improve systems performance.

Notice GB21-1035 and PDOM SB21-1075.

**TSO COMMAND PROCESSOR  
5798-AYF**

This FDP enables the TSO terminal user to get hard-copy listings at a remote location, using a 3284 or 3286 printer attached to a 3270 information display system.

Notice GB21-1122, PDOM SB21-1123, and Systems Guide LB21-1124.

**HEALTH CARE SUPPORT:  
ORDER COMMUNICATIONS SYSTEM  
5798-AYG**

This FDP is designed to simplify the entry and communication of doctors' orders, requisitions, and general messages, utilizing the 3270 information display system. The Order Communications System uses a

network of those display stations and printers to link hospital ancillary service departments and nursing stations to a central System/370.

Data is collected by the system through a 3270 light-pen *menu-selection* process from a series of screens designed by the user. Following visual verification, the information is communicated to the appropriate 3270 printers. Charges associated with the transactions are stored within the System/370 for processing by the hospital's accounting programs.

The system uses data files maintained by the Health Care Support/Admissions Systems FDP 5798-ASZ.

Notice GB21-1113, PDOM SB21-1114, and Systems Guide LB21-1115.

**VM/370 CONTROL AND ACCOUNTING PROGRAMS  
5798-AYP**

This FDP is designed to fulfill a number of requirements common to most VM/370 installations. Aids to facilitate accounting, directory maintenance, and DOS/OS-VM communication are provided. The FDP is modular, and the user can select just the desired functions. For CMS users, present education and training are sufficient to use its capabilities. All components are user-oriented.

Notice GB21-1110 and PDOM SB21-1111.

**HEALTH CARE SUPPORT:  
PHARMACY INVENTORY CONTROL SYSTEM  
5798-AZJ**

This FDP is designed to aid the hospital pharmacist in maintaining and controlling the inventory. Through timely reports produced by the system, the pharmacist can optimize stock levels, order drugs in economical quantities, greatly reduce the paperwork needed to maintain an inventory, and assist in the prevention of unauthorized use of designated drugs.

Notice GB21-1155, PDOMs SB21-1156 and SB21-1157, and Systems Guide LB21-1158.

**ONLINE PREPARATION OF VIDEO/370 FORMAT  
5798-BAC**

VIDEO/370-DOS (5736-RC3) and VIDEO/370-OS (5734-RC5) are used for online data entry operations with display screens and prompting. Customized display screen formats are designed by the user, and allow data entry operators to simply fill in the blanks.

This FDP is designed to bring the fill in the blanks concept to the format definition process. It does not supersede the format definition language, but does assist in the creation of the language statements. The responses needed to create the formats using the FDP are very short. Often only a single character or lack of response is all that is needed to create the fully structured language statements. Syntax errors that cause frustrating reruns are eliminated because the keywords are generated by the FDP.

Notice GB21-1210, PDOM SB21-1211, and Systems Guide LB21-1212.

**PRODUCTIVITY AID:  
IMS DICTIONARY SYSTEM  
5798-BBA**

This FDP is designed to assist the user in gaining more value from a data base by:

Increasing the availability of information about data to those with a need to know.

Enhancing control of data base creation, evolution, and use within the organization.

Decreasing the administrative time spent on the data base.

Improving the development and maintenance of applications systems.

Notice GB21-1255, PDOM SB21-1256, and Systems Guide LB21-1257.

Release Notice GB21-1342 and PDOM SB21-1343.

**TSO/VS2 PROGRAMMING CONTROL FACILITY  
5798-BBJ**

Integrity and security of system and user data are extremely important concerns in a multiple-user, online environment. This FDP provides significant enhancements to OS/VS2 TSO integrity and security features through individual user authorization codes to control program and file access and TSO command and program execution by the user.

Notice GB21-1273, PDOM SB21-1274, and Systems Guide LB21-1275.

**3330 DEVICE SUPPORT EXTENDED -  
SYSTEM/370 OS/MFT/MVT  
5798-BCE**

This FDP provides OS Release 21 users with modifications and procedures required to extend 3330 support to the 3333/3330 Model 11.

Notice GB21-1291 and PDOM SB21-1292.

**MICR DOCUMENT FINE SORT  
5798-BCN**

This FDP performs the fine sorting of MICR documents under program control. Relevant document MICR encoding is stored on disk in the System/370 after initially being read in a block sort program or transferred from a user application. These encoding images are matched to the physical documents subsequent fine sort passes. Through this image matching, documents are sorted based on their relative final position instead of their encoded value. Blocks of work can be defined so that high volume numbers receive fewer sort passes than low volume numbers.

The aim of the system is to save the user one or more sort passes. The system facilitates this with its number elimination techniques. The user environment and block definition skill will determine the actual number of passes saved. The FDP supports reader-sorters with up to thirteen pockets (1255, 1259, 1412, and 1419).

Notice GB21-1327, PDOM SB21-1328, and Systems Guide LB21-1329.

**1130 FORTRAN COMMERCIAL SUBROUTINES FOR DOS/VS  
5798-BCT**

This FDP offers the 1130 FORTRAN user converting to DOS/VS compatibility with the 1130 Commercial Subroutine Type II Program 1130-SE-25X, Version 3. It consists of Assembler Language subroutines which are functionally equivalent to each 1130 Commercial Subroutine. Also, it provides compatibility for the 1130 FORTRAN CALL DATSW Statement. The FDP allows 1130 FORTRAN Commercial Subroutine users to run programs under DOS/VS with minimal change.

Notice GB21-1318 and PDOM SB21-1319.

**3890 DOS/VS APPLICATION/INSTALLATION SUPPORT  
5798-BDC**

This FDP utilizes the standard user interfaces available to the DOS/VS user and provides him with the following capabilities:

Sort control instructions with an editor facility.

3270 Jam Display Routine.

Storage print facility.

These application functions will enable the user to increase his personnel productivity and facilitate 3890 program testing and analysis.

**APL/FINANCIAL PLANNING SYSTEM  
5798-BDE**

This FDP allows the financial analyst or budget planner to rapidly design reports, specify calculation statements, enter and change data, and obtain printed reports with immediate turnaround. All of these capabilities are interactive and easy to use. Reports may be tabular or graphic in format and include annual, quarterly, or monthly columns. The program prompts the user whenever he requests guidance or makes an invalid entry. It identifies and rejects invalid logic syntax as it is being entered. A simple, English-like financial language is used so that the user does not have to learn APL. A large set of financial, arithmetic, and forecasting routines are included which perform the necessary computation normally required in the planning and budgeting environment.

This FDP was written and tested using the APL Shared Variables Programming RPQ (APL-SV), program number 5799-AJF, and the Time Sharing Input Output (TSIO) auxiliary processor supplied with APL-SV.

Release Notice GB21-1339, PDOM SB21-1340, and Systems Guide LB21-1341.

**DOS/VS SORT FOR 1400 FILES  
5798-BDH**

This FDP provides the functions of 1400 Sort, uses the emulator disk, tape, and card files for input and output, and uses the faster System/370 Sort programs to generate sorted output.

Notice GB21-1361, PDOM SB21-1362, and Systems Guide LB21-1363.

**REGISTER AUDIT FOR 3650 RETAIL STORE SYSTEMS  
5798-BDK**

This FDP is a set of programs which operate on a System/370 and process sales data created by the 3650 Retail Store System. The system provides a comprehensive and systematic approach to the application which is the most fundamental and yet among the most critical and complex in the retailing environment - the accumulating, balancing, and auditing of daily sales.

For each point of sale terminal, a daily register balance report is printed; along with an exception list of voids and edit errors, special analysis transactions, and missing or duplicate transaction numbers. The following reports are produced for each store: register over and short, store balance, and department/class sales. When the audit and correction process is completed, the sales data and control totals are released to other applications.

Notice GB21-1349, PDOM SB21-1350 and Systems Guide LB21-1351.

**CMS SORT FOR VM/370  
5798-BDW**

This FDP provides several sort programs and subroutines which run under the CMS component of VM/370. They may be invoked from a COBOL, PL/I, FORTRAN, or BAL program, or as a CMS command. Compared with the SORT component of CMS, these programs offer a compatible replacement for the CMS sort command with improved function and performance.

Notice GB21-1376, PDOM SB21-1377, and Systems Guide LB21-1378.

**3890 OS/VS OFFLINE FINE SORT ENHANCEMENTS  
5798-BDY**

This FDP provides the user with the means to build and load programs into the 3890. The 3890 OS/VS Offline Fine Sort II FDP (5798-BDY) with the enhancement feature (specify 9526, 9527) will allow processing in an offline mode while taking advantage of new fine

sorting techniques.

Notice GB21-1383-1 and PDOM SB21-24.36.

**CONVERSION AID:  
SYSTEM/370 RPG II FROM SYSTEM/3 RPG II  
5798-CAA**

This conversion aid, designed to aid users converting from System/3 operation to System/370 operation, assists System/3 RPG II users in converting to System/370 RPG II. The program reads in System/3 RPG II source programs, analyzes the statements, flags the most common differences and, where possible, makes the appropriate conversion. Assistance to the user is also provided in the areas of OCL, file, and SORT conversions.

Notice GB21-1389, PDOM SB21-1390, and Systems Guide LB21-1391.

**ACCOUNTS PAYABLE  
5798-CAC**

This FDP enables the small System/370 DOS/VS user to implement an accounts payable application. The FDP consists of a series of programs which provide accurate and detailed record keeping for vendor invoices from the time they are entered until they are paid.

Programs are furnished to enter the vendor's invoice into the system, prepare a Cash Requirements Report in due date sequence, print Voucher Checks and a Check Register, perform check reconciliation, prepare a Vendor Analysis, and provide a Distribution Report for posting to general ledger.

Notice GB21-1392, PDOM SB21-1393, and Systems Guide LB21-1394.

**ACCOUNTS RECEIVABLE  
5798-CAE**

This FDP is designed to provide an open-item method of maintaining accounts receivables. The user has the option of detailed or summary trial balance. If desired, the aged statements can be printed for selected customers only.

Notice GB21-1395, PDOM SB21-1396, and Systems Guide LB21-1397.

**DOS/DITTO EXTENSIONS  
5798-CAF**

This FDP extends the capabilities of DOS/DITTO (5798-ARN), and are available as source statement alterations to that FDP.

Existing DOS/DITTO functions have been enhanced to support the 2560, 5425, and 3420 series tape units.

Twenty-four new functions have been added to provide file-to-file capabilities for 2311, 2314, 3330, and 3340 direct access storage devices.

Notice GB21-1398, PDOM SB21-1399, and Systems Guide LB21-1400.

**CHECK PROCESSING SORT PATTERN GENERATOR  
5798-CAH**

This FDP is a series of programs which provides check processing departments with a convenient means of generating and maintaining reader/sort stacker select tables and routines.

The tables and routines generated are specifically tailored to work with IBM's Check Processing Control System, but could be used with other IBM check processing systems. Direct attached 1410/2956s, 2947 attached 1419/2956s, and IBM 3890s are supported.

With almost daily requirement for maintenance, check processing departments require a simplified, user-oriented means of creating and updating sort code. This FDP will supply the macro library necessary to create the output and appropriate supporting documentation.

Notice GB21-1410 and PDOM SB21-1411.

**VS1 UTILIZATION MONITOR  
5798-CAK**

This FDP is designed to measure, evaluate, and document application program characteristics while executing in a virtual (VS1) environment.

The program provides information on CPU activity, paging activity, channel activity, I/O device activity, main storage occupancy and working sets under varying paging conditions. Report options allow problem program analysis at the system, partition, job or step level in summarized or detailed form.

Notice GB21-1404 and PDOM SB21-1405.

**3270 OPERATORS TRAINING COURSE UNDER ITS  
5798-CAZ**

The FDP is an Interactive Training System course to train operators on the use of the 3270 display station. This two-hour course will instruct the basic operations of all 3270 functions including selector pen, program function keys, program access keys, and various keyboards. ITS operates under control of TCAM, IMS or CICS to provide computer-aided instruction at the customer's location.

Notice GB21-1419 and PDOMs SB21-1420 and SB21-1421.

**DL/I BASIC PROGRAMMING COURSE  
5798-CBA**

This FDP is a self-study course using Interactive Training System or Coursewriter III to teach application programmers how to code DL/I calls for either IMS or DOS-DL/I. The course includes an overview of DL/I, call functions, and an overview of DL/I access method. Upon completion the student should be able to code an application program to access a DL/I data base.

A prerequisite for the course is Assembler, COBOL, or PL/I programming ability.

Notice GB21-1416 and PDOMs SB21-1417 and SB21-1418.

**3890 OS/VS PROGRAMMING TESTING AID  
5798-CBG**

This FDP assists in the testing of programs which execute in the 3890 Document Processor. The program allows banking users to define test cases which extensively check the logic of 3890-resident stacker-selection programs. This testing can be performed in a DOS/VS or OS/VS environment without requiring use of the 3890. The output of the FDP is a report which can serve as a communication vehicle between bank check processing and data processing departments.

Availability notice GB21-1444-1 and PDOM SB21-1445-2.

**CICS/MTCS 3270 SCREEN FORMAT UTILITY  
5798-CBH**

This FDP consists of programs and procedures which simplify the creation of input and output maps for the 3270 under MTCS, CICS or CICS/VS. The teleprocessing control system may run under DOS, DOS/VS, OS/MFT, OS/MVT, OS/VS1 or OS/VS2 on a System/370. The main program allows the users to specify this screen layout directly on an 80-column form and have the necessary control blocks generated directly from the screen layout. This makes coding new screens and changing existing screens extremely simple while reducing the chance for error. The existing Basic Mapping Support Facilities of CICS are used to provide the execution time map retrieval, interpretation services.

Optional features allow the user to explicitly name fields, to repeat fields (VS), insert EDIT words in a DSECT (VS) and to preview an output screen on a 3270 prior to coding the application program.

Notice GB21-1441, PDOM SB21-1442, and Systems Guide LB21-1443.

#### **EXTENDED SEQUENTIAL DISK FILES** **5798-CBN**

This FDP can help improve performance and reduce disk storage requirements for applications that add records to the end of a sequential disk file, thus, eliminating the need to re-copy the files. The subroutines in this FDP will be included in the user's assembler or COBOL programs through a CALL instruction.

The FDP supports 2314, 3330, and 3340 DASD devices and does not require special preformatting of extents. Blocked or unblocked fixed-length records may be added to sequential files and subsequently access through the standard DOS/VS sequential access methods via logical IOCS. Multiple files may be accessed in a user's program though only one copy of the FDP is included in the user's program.

Notice GB21-1456, PDOM SB21-1457, and Systems Guide LB21-1458.

#### **PAYROLL MANAGEMENT SYSTEM** **5798-CBR**

This FDP, written in RPG II, is a payroll system which provides basic payroll functions and comprehensive management reports.

The Payroll Management System is modular, allowing for easy implementation of only the payroll subsystems required. Included in the payroll system are file maintenance, time card preparation, time and attendance processing, payroll processing, file backup, check reconciliation, personnel record inquiry reporting, payroll history requests, vacation/sick pay reporting, workmen's compensation reporting, union reporting, labor distribution, deduction reports, employer contributions and quarterly/year-end processing.

Notice GB21-1453 and PDOM SB21-1454.

#### **FLEET DATA BASE REPORTING SYSTEM** **5798-CBW**

This FDP is designed for use with the Vehicle Maintenance Reporting Standard as published by the American Trucking Association, Inc. The system should remove the installation obstacles for most users, permitting them to obtain the direct financial benefits of better management information and more efficient maintenance and inspection procedures, provides actual operating maintenance and depreciation cost data, and produces an inspection listing, a cost-per-mile report and a controlled preventative maintenance schedule.

Notice GB21-1486, PDOM SB21-1487, and Systems Manual LB21-1488.

#### **HEALTH CARE SUPPORT/DL/I:** **APPOINTMENT SCHEDULING** **5798-CCA**

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides for the Scheduling and cancellation of appointments, and inquiry for patient schedules or resource schedules.

Reports of appointments scheduled, resource status, and resource utilization are also included. Prerequisite is the HCS/DL/I - Patient Registration System 5798-CCB.

Notice GB21-1468, PDOM SB21-1469, and Systems Guide LB21-1470.

#### **HOSPITAL CARE SUPPORT/DL/I:** **PATIENT REGISTRATION SYSTEM** **5798-CCB**

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides the ability to create, maintain, and inquire into an alpha index and basic patient information record for all patients treated by a medical facility. Common routines are provided to allow terminal printing and processing of accounting transactions (compatible with the Accounting System - 5746-H14).

Marketing Aid G520-2958 ... Folder G520-2957 ... Slide Set and Script GV20-0538.

#### **HOSPITAL CARE SUPPORT/DL/I:** **ADMISSIONS SYSTEM** **5798-CCC**

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides an online admissions capability for in-patients and out-patients. The program is built upon a patient data base established by the Patient Registration System (5798-CCB) by providing data entry and inquiry capability when a patient visits a medical facility. Included are admissions, transfers, and discharges. Accounting information is passed to the Accounting System (5746-H14).

Marketing Aid G520-2958 ... Folder G520-2957 ... Slide Set and Script GV20-0538.

#### **HEALTH CARE SUPPORT/DL/I:** **ORDER COMMUNICATIONS SYSTEMS EXTENSION** **5798-CCD**

This set of programs is an extension of FDP 5798-AYG which provides DOS/VS/DL/I support, VSAM, and operation under CICS/VS.

The basic FDP is a set of ANS COBOL, CICS programs designed to allow the entry and communication of doctors' orders, requisitions, and general messages through a *menu-selection* process on the 3270. Transactions are created by selecting entries from a series of screens. The previous entries selected are displayed on each successive screen. Following visual verification by the operator, the transaction is communicated to selected 3270 printers. Charges associated with the transactions are passed through a disk file queue for processing by user accounting programs. Entries may be made at nursing stations or service areas. Batch programs build and maintain files and dump queues for processing or recovery procedures. Exits are provided for user-written routines to incorporate a Patient Master Record and service area functions.

The capability to enter complete batches of charges, review them, and pass them to the Accounting System (5746-H14) is also provided.

Prerequisites (or equivalents) are the Patient Registration System 5798-CCB, Admissions System 5798-CCC, and Order Communications System 5798-AYG.

Notice GB21-1477, Marketing Aid G520-2948, Folder G520-2957, and Slide Set and Script GV20-0538. Notice GB21-1477 for 5798-CCD.

#### **HEALTH CARE SUPPORT/DL/I:** **PHARMACY ORDER ENTRY** **5798-CCE**

This FDP is a set of programs which provides DOS/VS/DL/I support, more complete patient profile, improved outpatient labeling, and data entry by technicians in addition to functions previously in the Health Care Support/Pharmacy Order Entry and Scheduling System (5798-AXQ). Operation is under CICS/VS.

The basic FDP is a set of batch and online ANS COBOL programs to be used by the pharmacist for entering drug orders, printing daily care plans, displaying and printing patient profiles for unit dose scheduling, printing of labels, charging and crediting drugs to the patient accounts, and maintaining a drug master file.

The FDP accommodates both non-unit dose and unit dose pharmacies. All entries are made through the 3277 keyboard with a minimum

number of screens. Charges and credits are passed to the HCS/Accounting System (5798-H14).

Patient Registration System 5798-CCB and Admissions System 5798-CCC are prerequisite HCS/DL/I programs.

Notice GB21-1480, PDOM SB21-1481, Systems Guide LB21-1482, and Installation Guide SB21-1585.

#### **HEALTH CARE SUPPORT/DL/I: PHARMACY INVENTORY CONTROL 5798-CCF**

This FDP provides DOS/VS/DL/I, CICS/VS support and improved control substance reporting in addition to functions previously in the Health Care Support/Pharmacy Inventory Control System (5799-AZJ).

The FDP helps pharmacists control stock by providing multiple location inventory processing for unit dose or individual prescriptions. Various online transactions update the files providing audit trails, monthly usage statistics, and stock status reports.

Prerequisite programs (or equivalents) are:

HCS/DL/I - Patient Registration System 5798-CCB  
HCS/DL/I - Admissions System 5798-CCC  
HCS/DL/I - Pharmacy Order Entry System 5798-CCE

Notice GB21-1483, PDOM SB21-1484, Systems Guide LB21-1485, and Installation Guide SB21-1585.

#### **CICS PLOT 5798-CCG**

This FDP allows the CICS user to manage the static storage requirements of CICS/VS and to optimize the real storage demands of the CICS system. The product displays both the virtual composition of the CICS/VS partition and the real storage residency of the virtual pages. It also can provide a working set summary which displays the total storage requirements for the resident operating system and the CICS/VS partition.

Notice GB21-1507 and PDOM SB21-1508.

#### **CICS NETWORK ACTIVITY SIMULATOR 5798-CCH**

This FDP provides a means of using sequential input support of CICS while introducing delays between messages that would simulate the input messages through a terminal or line. Multiple streams could simulate a multiline configuration allowing for a controlled rate of messages being processed. By bending the system's resources, the user is able to measure impact on response time, paging, utilization, etc. by comparative analysis.

Notice GB21-1504 and PDOM SB21-1505.

#### **INTEGRATED FINANCIAL SYSTEM - CUSTOMER INFORMATION FILE:**

System/370 ... 5798-CCL  
Demand Deposit Accounting ... 5798-CCN  
Installment Loan Accounting ... 5798-CCP  
Savings Accounting ... 5798-CCQ

These FDPs offer financial institutions the advantages of integrated processing of demand deposit, installment loan, and savings account with a Customer Information File (CIF).

Most of the relationships that a customer has with a bank or savings institution are contained in his record on CIF. Account balances and account status information are part of this record, and are kept up to date by automatic posting when the accounting applications are processed.

All accounts and services used by each customer are related, providing in one source a picture of the customer's total relationship. Inquiry is possible by customer name, name key, or account number.

The CIF can be built one application at a time, and the accounting functions implemented in any order.

CCL: Notice GB21-1552, PDOM SB21-1553, and Systems Guide LB21-1554.

CCN: Notice GB21-1552, PDOM SB21-1555, and Systems Guide LB21-1556.

CCP: Notice GB21-1552, PDOM SB21-1557, and Systems Guide LB21-1558.

CCQ: Notice GB21-1552, PDOM SB21-1559, and Systems Guide LB21-1560.

#### **GENERAL LEDGER AND FINANCIAL ACCOUNTING 5798-CCZ**

This FDP is designed to perform general ledger accounting and provide meaningful reporting of the accounting data as an aid in evaluating business performance.

Reporting flexibility is built into the system. At print time, the user can select detailed, summary-by-company, multi-company (combined), or comparative reports.

The system provides for transaction entries and editing, and produces the following reports: Transaction Register, Trial Balance, Budget and Forecast Report, Profit and Loss Statement, Common Size Profit and Loss Statement, Balance Sheet, Common Size Balance Sheet, Sources and Applications of Funds, and Summary of Financial Ratios.

Notice GB21-1525, PDOM SB21-1526, and Systems Guide LB21-1527.

#### **OS/DITTO EXTENSIONS 5798-CDA**

This FDP includes the following extensions to OS/DITTO, 5798-ARD:

High Speed/Buffered Tape-to-Tape  
Card-to-Disk  
Disk-to-Card  
Disk-to-Disk  
Tape-to-Disk  
Disk-to-Tape  
Disk-to-Printer Variable Blocked/Spanned  
Print Member of a PDS  
Data Set Compare (Tape and Disk)  
DATALOG  
UNCATALOG  
SCRATCH DATA SET/MEMBER  
LIST VTOC  
LIST SPACE ON PACK  
LIST CATALOG  
LIST PDS members  
Write Tape Mark Off-line.

Notice GB21-1549, PDOM SB21-1550, and Systems Guide LB21-1551.

#### **1400 COMPATIBILITY ACCESS ROUTINE 5798-CDB**

Using this FDP, a System/370 COBOL or Assembler Language program can access disk data files which are in the 1400 Emulator format. The FDP does not require the use of the 1400 Emulator, therefore, orderly conversion of 1400 emulated applications to System/370 native mode operations under DOS/VS is possible. The FDP supports 1311, 1301 and 1405 type files emulated on a 3330 or 3340 Direct Access Storage Device. Data files can be in the track or sector format and in either move or load mode.

Notice GB21-1546, PDOM SB21-1547, and Systems Guide LB21-1548.

**POWER/VS COST AND PERFORMANCE ANALYZER  
5798-CDG**

POWER/VS provides accounting records which contain important information concerning system utilization. This FDP reads those records and generates summary reports which should prove to be of significant benefit to data processing management. Reports include Execution (CPU), I/O Device Activity, RJE, and a Cost Analysis report based on user-specified cost figures. The FDP provides the facility to accumulate daily information for monthly reports. A user modification and/or addition may be developed to use these summary records for monthly billing.

The POWER/VS Cost and Performance Analyzer provides valuable operating information to Data Processing and Operation Managers. System tuning is possible by using the Performance Report to change placements of high activity files and indicate where excessive time and resources are used. From the Monthly Cost Analysis (which may be run at any desired frequency), a more enlightened view of computer costs can be obtained. Billing is facilitated because the data needed is available in a tape or disk record and need only be processed against the users customer data as bills are printed.

Notice GB21-1513, PDOM SB21-1514, and Systems Guide LB21-1515.

**CICS/VOLUME TEST FACILITY  
5798-CDJ**

This FDP is designed to enable users to stress their total telecommunications system in a production-like environment. It solves the need for volume testing when undertaking changes in terminals, in network configuration, in central hardware systems, in control programs, or in applications.

Notice GB21-1498 and PDOM SB21-1499.

**RPG II ANALYSIS AND DOCUMENTATION AID  
5798-CDL**

This FDP consists of two groups of programs and sorts which produce six different documentation/trouble shooting aids. The first group produces field and indicator cross-references on an individual RPG II program. The second group uses as its input data all of the customer's RPG II source decks from which it produces cross-reference analyses and documentation concerning programs, files and field usage in the users system.

Notice GB21-1566, PDOM SB21-1567, and Systems Guide LB21-1568.

**INVESTMENT ADVISORY PACKAGE  
5798-CDQ**

The Investment Advisory Package provides an automated solution to client portfolio analysis and management. Standard accounting functions and the generation of operational, client, and management reports comprise the primary functions of the system. Basic input to the system is trade transaction data, while the primary outputs are client portfolio reporting as well as analysis and performance reports for internal management use. Additional output consists of detailed edit listings of input transactions, numerous audit controls, warnings for system exception management assistance and extensive reporting for both internal and external use.

In the Investment Advisory field, data processing gives the manager more time to evaluate the total investment objectives for each account. The Investment Advisory Package will handle the bookkeeping tasks and audit trails for the portfolio.

Notice GB21-1575, PDOM SB21-1576, and Systems Guide LB21-1577.

**IMS MONITOR SUMMARY AND SYSTEMS ANALYSIS  
5798-CDT**

The IMS Monitor Summary and System Analysis Program (IMSASAP) is a set of programs designed to process DFSTRAPC output data from either IMS DC Monitor (FDP 5798-BDF) or IMS/VS Monitor (IMS/VS 1.0.1). It uses a subset of data collected by DFSTRAPC to produce several selectable, additional monitor type reports designed to fill the need of management, system analysts and programmers. The IMSASAP System output enables the user to analyze and adjust the parameters of a IMS Online System for optimum operations and performance.

Notice GB21-1581 and PDOM SB21-1582.

**3600 FINANCE APPLICATION PROGRAM FOR SYSTEM/370  
5798-CDX**

This FDP provides an application program for the 3601 Finance Communications Controller. Basic field validation is performed and program tables are provided for optional user-defined transaction processing. The 3600 operations are continued if the System/370 is unavailable. All transactions accumulated on the diskette during the period of availability can be sent to the host system when it resumes online operations. A sample VTAM application program is provided to validate correct communications with the System/370.

Notice GB21-1598, PDOM SB21-1599, and Systems Guide LB21-1600.

**BASIC AUTHOR TRAINING FOR ITS  
5798-CEB**

This FDP is designed to teach a student how to write a course for operation under the Interactive Training System 5734-XXC. The course includes instruction on:

- Overview of Computer Assisted Instruction and the Interactive Training System.
- Basic steps of course development.
- Use of the Course Structuring Feature.
- Basic use of the coursewriter language.
- Course validation.
- Basic course development procedures.

After completing the course, a student should be able to author a course for the Interactive Training System.

Notice GB21-1589, PDOMs SB21-1590 and 1591, Course Description/ Administration Manual SB21-2201, and Student Materials SB21-2202.

**BATCH INPUT EDIT FOR INTERACTIVE TRAINING SYSTEM  
5798-CEF**

This FDP assists users of the Interactive Training System (Program Product 5734-XXC) by enhancing batch mode for course data entry. The program reads cards punched with ITS source language, performs

a syntax and logic edit, and creates a batch tape for the ITS Batch Insert process. By using the program a course author is freed from the time-consuming terminal data entry process.

Notice GB21-1607 and PDOM SB21-1608.

**ONLINE BUDGET ACCOUNTING INFORMATION SYSTEM  
5798-CEG**

This FDP for public institutions adds the productivity of teleprocessing and the IBM 3270 Information Display System to the sound financial control established by the BACIS program product.

The capabilities of CICS/DOS/VS establish the framework for a comprehensive set of programs allowing online review of an institution's total financial position encompassing General Ledger, Revenue, and Appropriation accounts as well as the ability to review and update Budget Preparation data. With the ONLINE BACIS FDP and the BACIS program product, an integrated, online financial system can be implemented in a minimum of time providing sound control and a solid base of information to assist in meeting the ever increasing demands on governmental institutions.

Notice GB21-1610, PDOM SB21-1611 and Systems Guide LB21-1612.

**CUSTOMER INFORMATION FILE/TELLER CONTROL SYSTEM  
SUPPORT OF THE 3600 FINANCE COMMUNICATION SYSTEM  
USING CICS/DOS/VS  
5798-CEK**

This FDP provides host System/370 application support for the 3600 Finance Communication System in conjunction with the DOS Teller Control System FDP (5798-AND and 5798-APX) and/or the DOS Customer Information File FDP (5798-AHX).

This FDP also provides modifications for the Teller Control System and Customer Information File FDPs to allow a customer to combine the two data bases into a single integrated data base. The Customer Information File and the integrated Customer Information File/Teller Control System data base are further enhanced by the addition of data base and data communication support for Loan Inquiry and Payment Collection.

Notice GB21-1622, PDOM SB21-1623, and Systems Guide: LB21-1624.

**OS/VS GENERALIZED DATA COMPARE  
5798-CEQ**

This FDP provides the ability to selectively compare two data sets to determine the differences between them. It is primarily a test tool to be used on two versions of a data set (before and after testing) to identify the differences in data as a result of processing.

The program can handle standard IBM access method formats (VSAM, ISAM, SAM, BDAM), the IMS List Unloaded Data format (LUD), and it provides an exit for user-supplied code to handle non-standard formats.

The results of the "compare" are produced in report form with data differences clearly indicated.

Notice GB21-1628 and PDOM SB21-1629.

**CICS/MTCS ONLINE PANEL ENTRY LIBRARY SYSTEM  
5798-CET**

This FDP provides a system for creating, storing, updating and retrieving screen formats for the 3270 Display System in an online, interactive mode. It operates as an application program under both CICS (DOS/VS and OS/VS) and MTCS.

Primary input to the FDP is from the 3277 via an interactive session. There are batch functions including several reports and the ability to input BMS macro statements for incorporation screen formats into

Panels Library. Batch output also includes BMS macro statements corresponding to the screens in the library.

Notice GB21-1641, PDOM SB21-1642, and Systems Guide LB21-1643.

**EXTENDED AUTHOR TRAINING FOR ITS  
5798-CEX**

This FDP is designed to teach authors how to incorporate special or unique displays in a training course for operation under the Interactive Training System (5734-XXC).

The course includes instructions and exercises on:

Typical applications and use of special screen displays.

Creation of special screen displays to satisfy unique user requirements.

Use of the Course Structuring Feature to accommodate special screen displays.

The Basic Author Training FDP (5798-CEB) or equivalent instruction or experience is a prerequisite for this course.

Notice GB21-1647, Course Description/Administration Manual SB21-1648, and Student Materials SB21-1649.

**MANPOWER MANAGEMENT  
5798-CEY**

This FDP is designed to assist management in determining manpower requirements for use in scheduling personnel. The system provides tools which can make a substantial increase in productivity in a selling environment (such as a supermarket or retail store) possible. The system is also applicable in any work environment where the amount of work can be quantified and a work standard can be applied.

Notice GB21-1650, PDOMs SB21-1651 and SB21-1652, and Systems Guide LB21-1689.

**DL/I ADVANCED PROGRAMMING COURSE  
5798-CFC**

This FDP is a self-study course using the Interactive Training System Coursewriter III to teach the advanced functions of DL/I. A student should have taken the DL/I Basic Programming Course (FDP #5798-CBA) or equivalent before taking this course. The expected course length is four to eight hours, and covers Command Codes ... Boolean Operators ... Programmer's view of Logical Relationships ... Programmer's view of Secondary Indexes ... CICS Interface ... Variable Length Segments.

Notice GB21-1665 and PDOMs SB21-1666 and SB21-1667.

**3890 DOS/VS OFFLINE SORT  
5798-CFD**

This FDP allows users to generate off-line file sort programs in a DOS/VS environment so as to take advantage of the increased capabilities of the 3890 Document Processor. These capabilities, in conjunction with the advanced functions in the FDP, will enable users to process documents faster and more efficiently to meet the demands of the rapidly increasing check volumes.

The offline sort program can sort documents on any of the desired data fields. The file sort programs can be generated online and used at the time they are needed, or they can be standardized and loaded onto the diskette for recall from an offline load.

Some of the advanced functions that may be included in the fine sort program are Base Conversion, Number Compression, High Volume Kill, Block Sorting, High Order Zero Kill, Sequence Checking, Microfilming, and Multiple Column Control.

The 3890 DOS/VS Application/Installation Support FDP (5798-BDC) is a prerequisite for this FDP.

Notice GB21-1662 and PDOM SB21-1663.

#### **INVENTORY FORECASTING AND REPLENISHMENT MODULES 5798-CFH**

This FDP is a set of programs which generates ordering instructions for optimum replenishment of inventory items for retailers and wholesalers. These programs are designed to interface with a user's inventory status system via a common data transfer area.

The system consists of a series of modules performing these major functions:

Monitoring and measuring the average current demand at the item level.

Producing estimates of future item demand with allowances made for seasonality and trend.

Developing ordering decision rules for the optimum restocking of an item for various types of merchandising and replenishment situations. This includes the calculation of order point, maximum quantity levels, and specific order quantities; and anticipates future item orders, where maximum order size restrictions may require it.

Maintaining an accurate measure of lead-time at the item or vendor level, based upon current ordering experience.

Simulating the performance of the system through a month, a season, or a full year. This simulation will show the expected performance for a group of items in terms of sales, level-of-service and inventory requirements by week for the duration of the simulation.

Notice GB21-1674, PDOM SB21-1675, and Systems Guide LB21-1676.

#### **ALPHA SEARCH INQUIRY SYSTEM/ONLINE UPDATE 5798-CFJ**

This FDP adds online updating capability to the ASIS (Alpha Search Inquiry System) program product 5736-N14. Online update is an enhancement to the ASIS product. It provides the facility to make additions, deletions, and changes to records on the alpha search file via a 3270 Display System. The program product performs the update in batch mode.

Notice GB21-1677 and PDOM SB21-1678.

#### **CICS/VS PERFORMANCE ANALYZER II 5798-CFP**

This extended support FDP enhances design/performance evaluation by providing the CICS/VS user with the ability to collect and summarize selected information regarding resource utilization of the CICS/VS system. It may also be used by management to determine utilization of the CICS/VS system by department or location. CICS/VS Performance Analyzer II collects statistics on transactions as they flow through the system. Information collected on each task includes start and stop time, task number, count of access method calls, high-water mark for transaction and program storage, CPU and wait time. These statistics are collected on an external device and can be listed, sorted, selected, and summarized by a CICS/VS Performance Analyzer II batch program to provide task analysis reports. User exit is provided in this program for special reports as desired. PA II accounting facility provides an easy and flexible function to determine transaction billing data based on resource usage. PA II provides a user-specific billing algorithm.

#### **Key Function, Facilities, and Features**

- Tabulation of output of resource utilization information
- Identification of inefficient or heavily used tasks
- Flexible selection of transaction or terminal information over designated time periods
- Valuable accounting and billing data
- Task throughput data for application load analysis
- Techniques for problem determination
- DL/I timings
- Graphical output
- Multiple data sets
- Paging statistics on a task level
- Segmentation of conversational tasks

Notice GB21-1862 and PDOM SB21-1697.

#### **SOURCE PROGRAM MAINTENANCE ONLINE II 5798-CFT**

Program card handling can be eliminated by use of this extended support field-developed program. Source programs are held in a special library where they can be invoked and amended by the programmer from a 3270 and then submitted from the CICS partition to batch for compilation, etc. The facilities offered are similar to those of CMS EDIT mode of VM/370. Program directory status reports can be obtained on request and used to control the installations's program inventory. Operational programs can be archived to magnetic tape.

An optional feature is available for a comprehensive audit trail and reporting of changes made to all or selected programs. The audit and archive feature also provides a selective program archive and retrieval batch program.

Notice GB21-1696, PDOM SB21-1700, Quick Guide for Users, GX20-2006.

#### **APL/CMS FINANCIAL PLANNING SYSTEM 5798-CFX**

This FDP allows the financial analyst or budget planner to rapidly design reports, specify calculation statements, enter and change data, and obtain printed reports with immediate turnaround. All of these capabilities are interactive and easy to use. Reports may be tabular or graphic in format and include annual, quarterly, or monthly columns. The program prompts the user whenever he requests guidance or makes an invalid entry. It identifies and rejects invalid logic syntax as it is being entered. An English-like financial language is used so that the user does not have to learn APL. A large set of financial, arithmetic, and forecasting routines are included which perform the necessary computation normally required in the planning and budgeting environment.

This FDP is a multi-workspace system that runs under APL/CMS and uses the CMS stack processor to make the transition among the workspaces. The text, logic and data portions of the user-created systems are stored as CMS files. To save storage, all users share a single copy of the APL code.

Notice GB21-1705, PDOM SB21-1846, and Systems Guide SB21-1706.

#### **3790 BATCH TRANSMISSION SERVICES 5798-CGB**

This FDP is designed to provide the user with a communication interface between host application and the 3790 in a batch mode. It eliminates a significant portion of the effort necessary to install and implement a 3790 system, supporting 3790 batch transmission functions through a VTAM/NCP application interface program. It provides for multiple concurrent, time-of-day phased and/or sequential scheduling of sessions with the 3790. It allows the user to control the data flow to and from the 3790 in each session. A complete set of transmission statistics is maintained. These can be printed for each session or accumulated and printed for analysis of cycles.

Highlights:

- Reformat host print data into 3790 print data set format.

- Reformat 3790 transaction data to host application program format through supplied macros.
- Combine or maintain uniqueness of data from the 3790.
- Route data to specific 3790 or broadcast to all or a group of 3790's.
- Print 3790abend dumps.
- Maintain and print 3790 cluster standard information.
- Maintain and print an incident log of problems reported at the 3790.

Notice GB21-1713 and PDOM SB21-1714.

#### **TERMINAL CONTROL FOR DOS/VS ENTRY TIME SHARING SYSTEM 5798-CGC**

This FDP provides the necessary terminal control facilities for users of DOS/VS Entry Time Sharing System (5798-CFL) who do not have Minimum Telecommunications System/370 (5798-ALN) installed. Unless the user has Minimum Telecommunications System/370 installed, the Terminal Control FDP (or a similar user-provided capability) is a prerequisite for operation of the DOS/VS Entry Time Sharing System. This program is intended for use only with FDP 5798-CFL.

Notice GB21-1683, PDOM SB21-1684, Systems Guide LB21-1685, Terminal User's Guide SB21-1719, and Terminal User's Summary SB21-1735.

#### **HEALTH CARE SUPPORT/DL/I: OS PATIENT REGISTRATION SYSTEM 5798-CGE**

This FDP updates the DOS Health Care Support/DL/I - Patient Registration System FDP 5798-CCB (prerequisite for 5798-CGE) to permit installation of the product in an OS environment.

The basic FDP is a set of ANS COBOL, CICS/VS, and IMS/VS programs which provides the ability to create, maintain, and inquire into an alpha index and a basic patient information record for the patients treated by a medical facility. Common routines are provided to allow terminal printing and processing of accounting transactions (compatible with Health Care Support/Accounting System 5746-H14).

Notice GB21-1729 and PDOM SB21-1730.

#### **HEALTH CARE SUPPORT DL/I: OS ADMISSIONS SYSTEM 5798-CGF**

This FDP updates the DOS Health Care Support DL/I - Admissions System (5798-CCC) to permit installation of the product in an OS environment.

The resultant product is a set of ANS COBOL, CICS/VS, and IMS/VS programs which provide an online admissions capability for inpatients and outpatients. The system is built upon a patient data base established by the Health Care Support DL/I-OS Patient Registration System (5798-CGE) and provides data entry and inquiry capability concerning patient visits to a medical facility. Also handled are admissions, transfers and discharges. Accounting information is passed to an equivalent of the Health Care Support/Accounting System (5746-H14).

Prerequisites are Health Care Support DL/I FDPs OS Patient Registration System, 5798-CGE, and Admissions System, 5798-CCC.

Notice GB21-1732 and PDOM SB21-1733.

#### **EPIC:FAST - INSTRUCTOR GENERATED TEST 5798-CGJ**

This FDP provides preprocessor programs to enhance EPIC:FAST's (5735-E92) capability to expeditiously score, analyze and report the results of locally-prepared objective tests.

Allowing input from 3881, the IGT-FDP will create or modify an appropriate series of default level work files, including a Package File, Order File, Test File, and a Communications File. It will accept student

identification data, answer keys, responses, and post them to those files. At that point, this FDP will utilize EPIC:FAST, which will score, analyze and report test results.

Notice GB21-1746, PDOM SB21-1747, and LB21-1748.

#### **IMS DC PROGRAMMING COURSE 5798-CGX**

This FDP is a course to teach application programmers how to write message processing programs to use with IMS/VS or IMS/360. The course will operate under control of the Interactive Training System (5734-XRC) or Coursewriter III.

The material covered is equivalent to IMS/VS DC Programming Course (U3697), and will cover the topics of IMS DC Overview ... Message Processing Functions ... Conversational Processing ... Batch Message Processing ... System Service Calls ... Device Support.

Notice GB21-1763, PDOMs SB21-1764 and SB21-1765.

#### **CONVERSION AID: DOS DASDI JCL 5798-CHA**

This FDP is designed to reduce the manual effort required to convert DOS Job Control Language decks when changing types of disk drives. Although changes for permanent assignments and standard labels can be manually accomplished without much difficulty, ASSGN, DLBL, and EXTENT cards imbedded in JCL decks can require many hours of manual labor. This FDP allows the user to define conversion requirements with one master control card and a series of cards which describe the relationship between the old and new devices. There may be as few as two cards per disk drive. The DOS DASDI JCL Conversion Aid can provide substantial savings in personnel costs when large program libraries must be converted to reflect installation of new disk drives.

Notice GB21-1773, PDOM SB21-1774, and System Guide LB21-1775.

#### **3741 SORT PROGRAM 5798-CHB**

This FDP is a sort program for the 3741 Models 3 and 4. There are two programs; one is a 4K program which sorts up to 1024 records; the second is an 8K program which sorts up to 1898 records using two diskettes. The sort field can start in any record position from 1 through 128 with a field length of 1 to 16 bytes. The program does not require diskette work space. Sort control data is specified by a user *control label* on track zero record 26 of Drive 1 or 2. The user can specify: input data set name (Drives 1 or 2) ... sort field description ... output data set name (Drive 1 or 2) ... name of next program (program chaining) ... request printout of records sorted.

Since this program is to be installed on a 3741 Programmable Work Station, it is licensed to operate on a designated 3741 rather than a designated CPU. Therefore, on the Supplement to Amended License Agreement for IBM Program Products (For Specially Developed Programs) in the column entitled *Designated CPU Type/Serial Number*, the 3741 Programmable Work Station on which the 3741 Sort Program is or will be installed should be designated by type/serial number. An asterisk (\*) should be placed beside the serial number and the following statement inserted on the Supplement *\*For the 3741 Sort Program License, the term CPU in the License Agreement and Amendment and Supplement thereto refers to the 3741 Programmable Work Station.*

Notice GB21-1776, PDOM SB21-1777, and Systems Guide LB21-1778.

#### **CHECK PROCESSING ARCHIVE RETRIEVAL SYSTEM USING CPCS/3890 AND 3850 MASS STORAGE FACILITY 5798-CHH**

This FDP provides a method utilizing the data base created by CPCS for purposes of look-ups and adjustments.

The input to the FDP is the history tapes created under CPCS (CRE) and MCRE tapes. Those tapes carry all information on each check leaving and entering the system, including the 3890 item sequence microfilm number.

A data base is created for storage on a 3850, which comfortably allows storage of three months of data for a bank that processes a million checks a day. The FDP also provides an inquiry facility to run under control of CPCS to access the 3850 data base. This facility replaces the printed reports or COM currently used to research adjustments. The inquiry task allows a clerk to identify an item's location on the 3890 microfilm and to retrieve available information from the data base. Conversationally, the inquiry task accepts sequence number, document fields, outgoing or incoming information for use in the search. The operator also is allowed to *comment* the file. (The FDP can be used on a 3330 interim to the installation of a 3850.)

Notice GB21-1789 and PDOM SB21-1790.

**PRODUCTIVITY AID:  
IMS MONITOR SUMMARY AND SYSTEM ANALYSIS PROGRAM II  
(IMSASAP II)  
5798-CHJ**

IMSASAP II, an Extended Support FDP, is a performance analysis and tuning aid for IMS/VS data base and data DOCUMENT communication systems. It provides key reporting and usability enhancements for users of IMS/VS 1.0.1, 1.1.1, 1.1.3, 1.1.4, 1.1.5.

IMSASAP II is a report program that executes under the system for Generalized Performance Analysis Reporting (GPAP). IMSASAP II processes IMS/VS DB and DC monitor data to provide summary, system analysis, and program analysis level reports that assist in the analysis of an IMS/VS system environment.

The monitor concept has proven to be a valuable aid in the performance analysis and tuning of IMS systems. IMS ASAP II extends this capability by providing comprehensive reports, from management summaries to detail program traces, to meet a broad range of IMS/VS system analysis objectives.

When used in an appropriate manner on a regular basis, IMSASAP II may help to:

- Improve system performance
- Increase productivity of analysts and programmers.
- Provide on-going system measurement and management reporting capability.
- Assist in determining future requirements.
- Enhance system and program documentation.
- Provide pre-installation evaluation of applications and programs against installation standards.
- Reduce requirement to run DFSUTR20 and DFSUTR30.

Notice, GB21-1792 and PDOM, SB21-1793.

**TSO/3270 DISPLAY COPY SUPPORT  
5798-CHL**

This FDP allows TSO 3277 terminal users to print a copy of their current terminal display on a 3284, 3286, or 3288 Printer of their choice. They can also print a selected number of preceding pages, in effect creating a hardcopy log of all or part of their session.

The program runs in an OS/VS2 environment as part of a TCAM MCP. It is compatible with a complementary offering, the TSO Command Processor (5798-AYF), which allows a TSO user to print data sets on the same 3284, 3286, or 3288 Printer. It also can reside in the same system with the TSO 3270 Structured Programming Facility even though SPF has its own facilities for printing displays.

Notice GB21-1795 and PDOM SB21-1796.

**JUSTICE DATA BASE  
5798-CHP**

The administration of justice is a single process - a system composed of a series of events involving separate and independent agencies (law enforcement, prosecution, courts, corrections). Much of the information required in the justice process is common to more than one of the

agencies. This FDP provides a DL/I implementation of most of the common data bases required in a Justice Information System.

Specifically, this FDP provides the user the capability to create and maintain the following types of data: arrests/citations, case information, court calendars, and person data (data on all persons associated with the justice process).

In addition, it has the capability to perform the functions of name and number indexing, court calendaring, and report generation. It is written in COBOL and operates under both DOS/VS and OS/VS.

Although Justice Data Base is provided as a batch product, it operates as a transaction-driven system. It has been carefully structured to serve as a base for online implementations with minimal impact on existing programs. Justice Data Base was developed using top down design, structured programming and HIPO documentation techniques. This significantly eases the task of tailoring and/or extending the function provided.

Notice GB21-1801, PDOM SB21-1802, and Systems Guide LB21-1803.

**APL DATA LANGUAGE  
5798-CHR**

This FDP expands the capability of APL by providing the APL application programmer with a data management facility. It complements APL's extensive data manipulation facilities with a dictionary driven, data independent, data storage and retrieval system. The user can retrieve data across a network of interrelated files.

APL Data Language can help eliminate the usually large amounts of user-written data manipulation and housekeeping code. Data handling can be standardized, improving code readability and documentation.

It improves programmer productivity through more problem solving—less data handling activities. Applications previously abandoned or delayed due to complex data requirements may now be feasible.

The data base management services of APL Data Language assist the user in:

- handling complex data access and maintenance problems.
- describing and defining data bases.
- creating data bases.
- auditing data base activity.

Notice GB21-1804, PDOM SB21-1805, and Systems Guide LB21-1806.

**GENERALIZED TRACE FACILITY (GTF)  
DATA ANALYSIS PROGRAM  
5798-CHT**

Replaced by GTFPARS, 5798-CQQ.

**DOS/VS DASD SPACE UTILIZATION ANALYSIS  
5798-CHW**

This FDP produces three reports to assist the installation manager in analyzing disk space utilization.

A physical sequence report displays for each disk volume, the data sets, their record size, block size, lower extent, upper extent, and amount of space allocated to the data set. An alphabetic sequence report displays the same information in data set alphabetic sequence. In addition, there is a graphical representation report which graphically shows the physical location of each data set on the disk volume.

Notice GB21-1810 and PDOM SB21-1811.

**DOS/VS STORAGE AND CPU UTILIZATION PROGRAM  
5798-CHY**

This FDP will collect and graphically display, in real time or batch, information from the DOS/VS Supervisor which affects overall system performance. The program will display CPU cycles utilization by partition, real storage utilization by partition, the paging rates, and

other pertinent information. With the easy to interpret displays and reports, DOS/VS users can better understand the internal operation of their DOS/VS operating environment. They can identify job mixes and make better informed decisions regarding the use of their computer resources.

Notice GB21-1816 and PDOM SB21-1817.

#### THE 370X TRACE EDITOR 5798-CHZ

This FDP is designed to increase the usefulness of the 3704/3705 Dynamic Trace Output for users who are operating in emulation mode with either EP2.2 or EP2.3. The 370X Trace Editor allows the user to control the amount and type of output, in addition to reformatting the data into a more readable display. Output selections include:

- Up to four specific operation commands (the default is to all operation commands)
- A specific range of block numbers
- Up to two types of final status and/or sense. (The default is to any status or sense.) The output is in a symbolic form, representing a CPU-to-370X-to-terminal-line connection.

Notice GB21-1822 and PDOM SB21-1823.

#### VIDEO/370 ONLINE STATUS DISPLAY 5798-CJA

This FDP allows the VIDEO/370 user to obtain the status of multiple input batches and availability of disk space via online inquiry/display from any VIDEO/370 terminal. Inquiries may be made using partial names. This FDP is similar to that provided by VIDEO/370s offline Job Status Report. Without this FDP, online status inquiries must be requested of an individual batch and may be obtained only if the full 12-character document name is provided. As this FDP is an extension to VIDEO/370 (5736-RC3 or 5734-RC5), it carries with it the security and auditability features of VIDEO/370.

Notice GB21-1840 and PDOM SB21-1841.

#### OS/VS CAPACITY MANAGEMENT AID 5798-CJB

This FDP provides a profile of total system workload by day, shift and week. Each week's data is averaged into a 24-hour profile. This correlates the following: Total CPU Utilization, TSO plus Batch User Utilization, Batch Only Utilization, SWAP plus Demand Paging Rate, Demand Only Paging Rate.

Data is also summarized/averaged, both total and by shift for each week. Data items plotted are CPU available time, total CPU utilization, batch user utilization, TSO user utilization, operating system utilization, job-step count, TSO session count, SWAP page rate, demand page rate.

Notice GB21-1834, PDOM SB21-1835, and Systems Guide LB21-1836.

#### BASIC OS JCL TRAINING 5798-CJC

This FDP is a course designed to teach operators and programmers the use of OS/VS Job Control Language. The training is accomplished through the use of the Interactive Training System (5734-XXC). The course covers the definition and purpose of JCL, the syntax and format of JCL, parameters used in JOB, EXEC, and DD cards, the construction of JCL procedures and JCL error diagnosis.

Notice GB21-1831, Course Description/Administration Manual SB21-1832, and Student Material SB21-1833.

#### BASIC VSAM TRAINING FOR DB/DC USERS 5798-CJE

This FDP is designed to teach programmers the facilities and usage of VSAM required for more effective use of IBM's DB/DC products. These DB/DC products have been designed to take advantage of VSAM's capabilities; therefore one must have a basic understanding of VSAM to take full advantage of the DB/DC products. This course covers VSAM terminology, VSAM catalog management, data set organization, Access Method Services, VSAM JCL, and data management in a DB/DC environment. The course is not intended to teach VSAM coding as this is a transparent facility provided by IBM's DB/DC products.

Notice GB21-1825 and PDOMs SB21-1826 and SB21-1827.

#### CICS/VS DATASET RECOVERY FACILITY 5798-CJF

This FDP provides for forward recovery of OS/VS and DOS/VS data sets that have been physically destroyed. The FDP will recover all the activity (add, delete, update) that has occurred on a data set under CICS/VS between the time of previous backup and the current failure. The FDP works in conjunction with the CICS/VS journals. The CICS/VS journals are read and the activity in the journal will be restored to the appropriate data set.

Notice GB21-1837 and PDOM SB21-1838.

#### VIDEO/370 REVERSE EXTRACT/OFFLINE DATA ENTRY 5798-CJG (DOS/VS) 5798-CJP (OS/VS)

This FDP provides the means for offline data entry onto VIDEO/370 data files for online correction and editing. The program accepts input data records from tape, disk, or card files in fixed or variable length record formats or optionally from user-written input exit. The fields within each data record are defined, edited, and reformatted according to the rules set up with the Format Definition Program of VIDEO/370. Applications for this FDP include:

Reverse Extraction - allows the re-entry of VIDEO batches which have been extracted.

Batch Data Entry - allows VIDEO editing and modification for data collected from other sources.

Data Field Update/ADD - allows users files to be placed onto video files for online addition of updating.

Improved File Flexibility - eases reorganization of VIDEO files and allows retention time for disk files to be decreased.

Notice GB21-1843, PDOM SB21-1844, and Systems Guide LB21-1845.

#### 3660 SUPERMARKET BATCH COMMUNICATION SUBSYSTEM - ADVANCED SCHEDULING ENVIRONMENT 5798-CJQ

This FDP provides batch communication support for both the 3660 Scanning and Key Entry Supermarket Systems, and offers extensive facilities to help minimize the operational and administrative activities in an expanding supermarket communications network.

It provides a command language that allows the user to easily create and alter planned schedules for supermarket data transmissions. Extensive recovery and reconciliation facilities either immediately handle exceptions or automatically retry them in subsequently scheduled transmissions. The capability to group supermarkets and/or data logically, reduces the schedule redundancy, which can be significant in a complex communication and data set environment. Comprehensive offline support, including summary and exception reports, data set maintenance utilities and subroutines, further simplifies the operational environment.

Notice GB21-1859, PDOM SB21-1860, and Systems Guide LB21-1861.

**LEARN II OPERATOR TRAINING FOR ATMS  
5798-CJR**

This FDP is a computer-based training course designed to teach terminal operators and secretarial personnel the advanced functions of the Advanced Text Management System (ATMS). The course includes a review of basic ATMS functions followed by material on extended command and control functions, the Generalized Markup language, and new functions added since the first release of ATMS.

This FDP runs under control of either the OS or DOS version of ATMS Version 1.3 (5740-XX3 or 5746-XX4), which includes the Generalized Markup language facility. The lessons can be taken using all terminal types currently supported by ATMS.

Notice GB21-1863 and PDOMs SB21-1864, SB21-1865, and SB21-1873.

**3790 HEALTH CARE DISTRIBUTED SUPPORT:  
ADMISSIONS SYSTEM  
5798-CJW**

This FDP gathers and maintains, at the 3790, in patient and out patient data essential for many hospital activities. The following functions are provided: pre-admission, admission, transfer, discharge, bed inquiry, name inquiry, admission forms, basic bed census, and creation of accounting system records. Necessary utilities for file creation and maintenance are included.

Notice GB21-1869, PDOMs SB21-1870 and SB21-1872, and Systems Guide LB21-1871.

**CICS/VS DUMP READING  
5798-CJX**

This FDP is designed to create and display direct-access data sets containing an image of the partition or region at the time of an CICS/OS/VS ABEND. There are nine application modules which run under CICS/VS OS/VS to provide an online capability for analyzing and debugging of dumps via an IBM 3270. The functions which can provide a productivity and problem solving tool consist of the following:

- Display on the 3270 from the dump data set, any core location specified by the user.
- Scan through the dump data set to find the combination of characters that the user requests, and display the location and data.
- Display General Purpose Registers and Program Status Word at time of ABEND.
- Locate and display from the FDP dump data set the following CICS Tables: Terminal Control Table, File Control Table, Destination Control Table, Program Control Table, and Processing Program Table.
- Format and display CICS Trace Table Entries for a given task within the dump data set.
- Map any area of core against any DSECT available to the user.
- Recap CICS status, number of active tasks, suspended tasks.

In addition, a program is supplied to print the dump data set if a hard copy is required.

Notice GB21-1874 and PDOM SB21-1875.

**ATMS BATCH BACKUP  
5798-CJY**

This FDP is designed to produce back-up tapes for ATMS permanent storage records without the need for CICS or ATMS modules being resident. The tape is compatible with current ATMS back-up tapes. The reporting facilities allow execution-time printing selections of detailed (operator master and document) records. A user exit facility is included which allows examination of back-up records and directs the control back-up program to skip a record, back it up, or end the job. A security function allows or prevents the printing of operator password and access words and passes this information to user exits.

Notice GB21-1880 and PDOM SB21-1881.

**CMSERVICE  
5798-CJZ**

This FDP is a general utility program which runs under the Conversational Monitor System (CMS) of VM/370. It makes computer services more readily available to new time-sharing users with limited experience other than control functions or unit record. It performs typical utility functions such as tape-to-card, card-to-disk, etc., but with sufficient prompting to enable inexperienced operators to: store and maintain control of intermediate unit record files ... invoke utilities such as sort and merge to eliminate intermediate punched card output ... generate jobstreams by imbedding data within the appropriate JCL ... reduce contention for initiators or partitions and devices of coresident systems.

Notice GB21-1877 and PDOM SB21-1878.

**3790 SORT PROGRAM  
5798-CKA**

This FDP is designed to sort 3790 user data sets on the IBM 3790. The program accepts as input the SORTkey and a reference back to the source data. The program sorts in either ascending or descending sequence, uses sort key lengths of 2, 6, 14, 30, or 62 bytes, sorts user data set or new data being entered from a terminal, and sorts concurrently with other 3790 programs.

Notice GB21-1883 and PDOM SB21-1884.

**BILL OF MATERIAL SYSTEM FOR IMS/VS  
5798-CKC**

This FDP provides the capability to create and maintain an IMS Bill of Material data base. In addition, six basic bill of material retrievals with exits for user coding are provided. Additional functions include physical and logical relationships enabling explosions and implosions, low level coding and continuity checking, bill of material option selection, engineering change effectivity logic, and bill of material access through part number.

Notice GB21-1888, PDOM SB21-1889, and Systems Guide LB21-1890.

**DOS/VS INTERACTIVE DEBUG FACILITY  
5798-CKF**

This FDP extends the productivity benefits of the DOS/VS Entry Time Sharing System (ETSS) to include online program testing and debugging. It is an interactive command processing program which allows a terminal user to monitor and control the execution of a program from a terminal for the purpose of testing and debugging that program. From the terminal, a programmer will be able to: start and stop at specified breakpoints, single cycle on instruction or branch basis, monitor changes to data areas or registers, display data areas or registers, change data or registers, locate strings of data or conditions, trace or alter the logical flow of execution, display source statements during the session, plus many other functions.

The program has its own command language, simple commands with few operands or delimiter requirements.

It is a read-only program which should reside in the DOS/VS shared virtual area where it is possible for a single copy to be in use by several terminal users at one time.

This program may be used in debugging most programs which may be loaded from the DOS/VS Core Image Library or from object modules loaded by the DOS/VS Time Sharing System LOADER utility. However, it is most effective with single phase programs written in: Assembler, COBOL, or PL/I and to a lesser degree, FORTRAN IV.

The Interactive Debug Facility will run on a System/370 with DOS/VS and a minimum of 128K bytes of memory. It is primarily intended for use with the DOS/VS Entry Time Sharing FDP (5798-CFL), however, an option is provided which allows the program to be used with a DOS/VS batch partition using the system console.

Notice GB21-1897, PDOM SB21-1898, and Systems Guide LB21-1899

**DOS/VS LOADER  
5798-CKG**

This FDP provides link edit type capabilities in a compile (or assemble), load and go environment. Due to its performance characteristics, it can have a significant effect on total throughput where the compile-load-go type jobs are frequently executed.

The Loader program combines the basic editing and loading functions of the linkage editor and program fetch in one job step. Therefore, the function performed by the loader program is equivalent to the link edit and execute function.

The Loader program will load the basic input from either SYSLNK or SYSIPT. INCLUDE statements will be resolved from the relocatable library. Unresolved external references will also be resolved from the relocatable library unless NOAUTO has been specified.

The Loader program does not produce load modules for program libraries such as the core image library.

Notice GB21-1900 and PDOM SB21-1901.

**CICS/VS BASIC APPLICATION PROGRAMMING  
5798-CKH**

This FDP operates under the Interactive Training System (5734-XXC) or Coursewriter III (5736-E11 or 5734-E13). The course is designed to teach programmers to code CICS/VS basic application programs. The course topics are:

- Introduction to CICS/VS
- Basic Programming Techniques
- Terminal Services
- File Services
- Storage Services
- Temporary Storage Services
- Program Services
- Dump Services
- Basic Application Debugging

Notice GB21-1906, Administrator's Manual SB21-1907, and Student's Manual SB21-1908.

**HASP-JES2 SPOOL TRANSFER PROGRAM  
5798-CKJ**

This FDP is designed to enable users to transfer all or select jobs from one system's spool file to the spool file of another system. This function allows the user to shut down one system (e.g., MVT) and bring up a new or test system (e.g., MVS) without waiting for the queues to become inactive. The transfer program will transfer spool files in either direction between systems.

The primary use of the program is to facilitate testing of new systems, but a secondary use is its ability to transfer all or portions of the spool file to tape for reloading and processing at a later time.

Notice GB21-1903, PDOM SB21-1904, and Systems Guide LB21-1905. Marketing Guide ZZ20-3496.

**GENERALIZED DATA AREA MONITOR  
AND DISPLAY PROGRAM  
5798-CKK**

This FDP provides a generalized capability to monitor and report on system data areas in an OS/VS environment. The FDP makes no assumptions as to which data areas are to be monitored. Through control cards, the user describes system data areas which can be accessed by a problem program. The FDP monitors and reports on those data areas.

Data areas to be monitored are defined by specifying in a control card the data format of the data area and a series of displacements to pointers within the system. Ten data formats may be specified and up to seven displacements can be provided to locate the system data area to be monitored. The data formats are one byte binary number, two byte binary number, three byte binary number, four byte binary, signed halfword, first word of time-of-day clock, doubleword time-of-day clock, binary integer (bit) character format, hexadecimal format.

Detailed and summary reports may be generated. The detailed report shows the description supplied in control cards and the observations during the measurement interval. The detailed report formats as many user specified observations as will fit on a user specified print line. Twenty observations may be printed on each 208 character line on a 3800 printer and 12 observations on a 132 character line.

The summary report prints arithmetic mean, high value, and number of zero observations for each arithmetic data area specified by the user. Default values for length of measurement interval, number of intervals in the summary, and the number of summary reports in a run can be overridden by the user.

Notice GB21-1909, PDOM SB21-1910, and Systems Guide LB21-1911.

**CICS/VS ONLINE BILL OF MATERIALS  
5798-CKP**

This FDP is a set of programs which perform online retrievals from the Bill of Material System-DL/I (5798-CED) data base via CICS/VS. The retrievals consist of single level explosion, single level implosion, indented explosion, indented implosion, summarized explosion, summarized implosion, and inventory status.

In addition, programs exist to allow online build of item master maintenance transactions, and online build of product maintenance transactions for the DL/I Bill of Material data base FDP (5798-CED).

Notice GB21-1917, PDOM SB21-1918, and Systems Guide LB21-1919.

**CASHIER ASSIGNMENT SYSTEM  
5798-CKQ**

This FDP is designed to assist grocery management in planning the staffing required for checkout activities in supermarkets. Its objective is to more effectively use checkout personnel in providing the desired level of customer service. Major functions include:

- Developing historical workload patterns
- Establishing historical throughput rates
- Reporting individual throughput rates
- Projecting daily and hourly personnel requirements

The system is also designed to provide management with information needed to more closely match individual skills with different job requirements. Other features of the system include an innovative use of standard 3660 Supermarket System functions to capture customer queue length and bagger sign-on information and the provision of a comprehensive set of options to tailor the system to specific customer requirements.

All operational data required by the FDP is collected by the 3660 Scanning and Key Entry Supermarket Systems. This data can be obtained directly from either the Supermarket Batch Communication Subsystem/Advanced Scheduling Environment FDP (5798-CJQ) or the Exception Log Processing Subsystem FDP (5798-CDN). The system is written in COBOL under DOS/VS using VSAM and operates on a System/370 Model 115 (128K) and up.

Notice GB21-1921, PDOM SB21-1922, and Systems Guide LB21-1923.

**BOLDFACE PRINT PROGRAM FOR THE IBM 3800  
5798-CKR**

This FDP provides highly visible over-sized printing from the IBM 3800. In addition to uses requiring legible printing visible at moderate distances such as in the case of sign printing, printing of labels, or warehouse picking tickets, this program may be of use in text processing, computer printed addressing, or large graphics preparation. The FDP uses a half-inch alphameric character set which may be intermixed with a standard 3800 character set. Additional facilities are provided for underscoring and horizontal compression/expansion of printed material.

Notice GB21-1942 and PDOM SB21-1943.

**INTRODUCTION TO TSO**  
**5798-CKT**

This FDP is a computer-based training course, directed to new TSO users, which serves as an introduction to the concepts and facilities of TSO. The course guides a student interactively from an understanding of the concepts through LOGON and most of the TSO commands. This FDP is designed to shorten the training cycle of new TSO users by exposing them to the correct and productive uses of TSO. It is operational under Interactive Training System and Interactive Instructional System.

Notice GB21-1924, CD/AM SB21-1925, and student materials SB21-1926.

**USING TSO EFFECTIVELY**  
**5798-CKW**

This FDP is a course of instruction which operates under the Interactive Training System program product (5734-XXC). The effective and productive use of TSO goes beyond what one gets from the command language reference manual. This course addresses many of the aspects of TSO not fully understood by most users. The course is not oriented toward the new TSO user, but rather toward experienced users who want to get more out of their system. The course sessions contain review material and cover the following topics: Data Set Naming Conventions ... Data Set Organization ... Control of Disk Space ... Advanced EDIT Techniques ... 3270 Techniques ... Program Testing Techniques ... Structured Program Facility ... Selected Command Operands ... Expanded MVS CLIST Capabilities.

Notice GB21-1927, Student Materials Manual SB21-1929, and Course Description/Administration Manual SB21-1928.

**COBOL INTERACTIVE DEBUG TRAINING COURSE**  
**5798-CKX**

This FDP is an Interactive Training System course designed to teach CMS and TSO COBOL programmers how to use the IBM program product, COBOL Interactive Debug (5734-CB4). The course covers the need for and advantages of COBOL Interactive Debug, the specification of the TESTCOB command under a variety of circumstances, the complete subcommand language, many examples, and two sample sessions.

Notice GB21-1930, Course Description/Administration Manual SB21-1931, and Student's Materials Manual SB21-1932.

**IMS/VS MESSAGE FORMAT SERVICES TRAINING**  
**5798-CKY**

This FDP is a course of instruction which runs under the Interactive Training System program product (5734-XXC) or the Interactive Instructional System program product (5748-XX6). The technical concepts taught in this course are intended primarily for the implementors of IMS 3270 screen designs. The topics covered by this course include: Overview of IMS ... Format Creation ... Message Input and Output Descriptions ... Mapping Options ... Paging ... Language Facilities ... Device Features ... Standards.

Notice GB21-1933, course description/administration manual SB21-1934, and student materials SB21-1935.

**3770 COMMUNICATIONS UTILITY**  
**5798-CKZ**

This FDP provides a host program that will maintain a library of 3770 function programs and transmit to and receive from the programmable models of the 3773, 3774, and 3775. The library maintenance function builds and maintains a VSAM library from the data set created by the Program Validation Services program (BQBLIBI). The transmission function will process function programs, terminal commands, and data through the Basic Telecommunications Access Method (BTAM) using Binary Synchronous Communications.

Notice GB21-1936, PDOM SB21-1937, and Systems Guide LB21-1938.

**3600 DATA ENTRY**  
**5798-CLA**

This FDP provides formatted data entry capability using a fill-in-the-blanks technique. The program monitors the data as it is entered to ensure data integrity with pattern parameters and provides operator options, such as forward and back tab functions, field and/or character correction, diskette logging, and print image capabilities. The user creates the data entry patterns by entering the pattern image on the 3604 Keyboard Display. This image is stored on the diskette and contains the name and descriptive information, the data to be entered, location of the data on the display, the type of data (alpha or numeric), and the length of the data field. This FDP is designed to operate as a standalone program in the 3600 system or to be included as a part of a 3600 application program.

Notice GB21-1939 and PDOM SB21-1940.

**IMS HISTORY REPORTING SYSTEM**  
**5798-CLB**

This FDP is designed to provide IMS/VS DC users with the ability to obtain information about the utilization and performance of their online system on an ongoing basis. The FDP provides routines which, using the IMS/VS log tape, edits and stores information pertaining to system load and performance in an IMS data base. A command language is then used to construct tailored reports from the data base on a demand basis.

Summary and/or detailed reports can be obtained for any desired combination of date range, time span, and transaction codes. The reports can be produced as a normal OS/VS batch job or can be invoked as terminal output to a TSO session. A method is provided to identify periods of deviation from the user-observed and/or statistically-defined performance norms.

The program can also be used to reconstruct transaction codes and conversational SPA contents for terminals active at the time of an IMS/VS system failure; the information can be used to assist in system reconstruction during exceptional IMS/VS emergency restart situations.

Notice GB21-1945 and PDOM SB21-1946.

**3600 STATISTICS AND MESSAGE LOG REPORTING**  
**5798-CLC**

This FDP collects the statistical counters and message log contained in each 3600 controller defined to the VTAM system, then produces a detailed exception report of all items needing attention. This report provides a means for tuning 3600 configurations and tracking and diagnosing device errors from the central site. The FDP consists of three programs for both DOS/VS and OS/VS. There is a 3600 application program, a VTAM data collection program, and a report printing program.

For each 3600 controller, the report program prints the entire message log and the statistical counters for each device that has an error indicated. For every error device, the Loop, Slot, Device Address, and Workstation assignments are listed along with the non-zero statistical counters and their detailed description.

Notice GB21-1951, PDOM SB21-1852, and Systems Guide LB21-1853.

**CHECK PROCESSING CONTROL SYSTEM (CPCS)**  
**ONLINE ADJUSTMENTS**  
**5798-CLD**

At the completion of a day's check processing activity using CPCS (Check Processing Control System), 5734-F11, out-of-balance conditions may exist on one or more groups of work. These must be corrected by making the appropriate changes to the processed items, and by additions and deletions of certain documents. As a rule, this adjustment process is manual.

This FDP gives the user on-line access, via 3270, to strings of document images created by CPCS. Further, it gives the user several options for making on-line adjustments (CHANGE, INSERT, DELETE, INQUIRY, BALANCE) to correct, add or delete one item at a time, and

obtain balance information, until the full day's check processing work is in balance. A variety of screens and hard copy aids the user in locating and correcting out-of-balance conditions, and in checking the work after adjustments.

Notice GB21-1948 and PDOM SB21-1949.

### **3600 FINANCE APPLICATION PROGRAM II 5798-CLE**

This FDP runs on the 3601 or 3602 Finance Communications Controller and includes support for both the Binary Synchronous Communications and the Synchronous Data Link Control line disciplines. The FDP allows a teller to process financial transactions with or without a host computer. Transactions from the 3604, 3606, 3608, and 3614 are supported.

Notice GB21-1954, PDOM SB21-1955, and Systems Guide LB21-1956.

### **STRUCTURED PROGRAMMING MACROS 5798-CLF**

This FDP, used with OS/VS, DOS/VS and CICS Assemblers, is a set of macros designed to facilitate the use of structured programming.

Structured programming is the key element of the improved programming technologies. High productivity gains in all areas of the programming activity have secured a permanent place for structured programming methodologies as the discipline of the programming profession. Up to now structured programming has been restricted to higher level languages where existing functions are adaptable to the structure theorem's control figures. This FDP provides the full capabilities of the structure theorem to Assembler language users.

Assembler language programs are written in a top down fashion with the macros corresponding to the structure theorem's control figures.

Macros provided are: IF/ELSE/EIF ... DOWHILE/EDO ... DUNTIL/EDO ... DOPROC ... PRO/EPROC ... DCL/EDCL ... CASE/ECASE.

Notice GB21-1957 and PDOM SB21-1958.

### **System/370 VS BASIC CONVERSION 5798-CLH**

This FDP is designed to assist users of G. E. Mark III, CDC CAII/370 Basic, and Tymshare Superbasic in converting programs and data to VS BASIC and the required data formats. Program conversion includes modifying the format of Basic statements; replacing Basic statements, functions and operators with equivalent VS BASIC statements, functions and operators; changing BCD characters to EBCDIC characters (optional), and flagging statements which have no equivalent in VS BASIC and cannot be converted. Data conversion includes replacing commas (or another delimiter) with blanks, and enclosing character fields in quotes.

Availability notice GB21-1963 and PDOM SB21-1964.

### **ON-US EDITING FOR THE 3890 5798-CLJ**

This FDP generates on-us editing code for the IBM 3890 Check Processor and for the Check Processing Control System (CPCS) Online Reject Re-entry task. It provides a simple straightforward means of specifying MICR capture editing requirements for on-us documents. From these specifications, 3890 SCI routines are generated which perform, by on-us pocket, table lookups, range tests, modulus checks, and field validity checks.

Code generated is compatible with the Check Processing Control System (5734-F11) and the Sort Pattern Generator (5798-CAH). Code can be generated for both the 3890 and CPCS Online Reject Re-entry.

Notice GB21-1966 and PDOM SB21-1967.

### **IMS MASTER TERMINAL OPERATOR ASSIST FACILITY 5798-CLK**

This FDP is designed to assist the IMS master terminal operator perform complicated or voluminous IMS command entry required to control large telecommunication networks, applications, and data base and system resources.

Command sequences are precoded and stored for recall and execution as required by the master terminal operator, improving operator efficiency and eliminating entry of erroneous command keywords and parameters.

Existing master terminal operator capabilities and IMS recovery/restart capabilities are retained with this facility installed.

Notice GB21-1969 and PDOM SB21-1970.

### **IMS JOB DEVELOPMENT SYSTEM II (IMSJDSII) 5798-CLP**

This FDP is an enhanced version of the IBM Online Program and Job Development System (5798-CDR).

It provides the capability to develop, edit, modify, test and execute OS/VS jobs from IBM 3277-2 and 3275 Display Stations supported by the IMS and IMS/VS DB/DC systems.

IMSJDSII has all the basic functions of the original product plus:

- Extended 72 character mode editing
- Extended 80 character mode editing
- Extended execute function allowing for dynamic include of other input acts or copy members
- Job status display
- Enhanced installation procedure
- Extended copy function
- Online display of OS/VS data sets
- Multiple generations of SYSOUT data
- Additional user exit so users can use existing library management systems with IMSJDS
- Support for MVS
- Enhanced data display
- Software tabbing
- Improved user statistics
- Performance improvements
  - Load balancing
  - No resident MBP requirement
  - Copy function 50% less calls
  - Delete performance improvements
  - More efficient data base organization
  - Elimination of previously required high overhead functions
  - Significant improvement in performance of execute function.

Notice GB21-1978 and PDOM SB21-1979.

### **CONVERSION AID: DIRECT ACCESS STORAGE 5798-CLQ**

This FDP is intended to reduce the manual effort required to perform Direct Access conversion. IBM 3330 Models 1 and 11, 3340, 3344, and 3350s are supported.

The FDP provides for:

- Generation for JCL and utility statements required to allocate space on the new device, move the data set to the new device, update the catalogue.
- Identification of affected data set JCL statements in the procedure library, and generates a jobstream to update the procedure library using user-supplied JCL parameter arguments.
- Space calculation routines to identify data sets whose current blocking factors do not effectively utilize space on the new device.
- Data set space requirements are calculated for the new devices.

Due to device independence, this FDP is not required for VSAM.

Notice GB21-1990 and PDOM SB21-1991.

**HIERARCHICAL MONITOR SYSTEM FOR THE 3600 (HMS3600)  
5798-CLT**

This FDP provides monitor functions that can significantly reduce the implementation time of a distributed function terminal based system. HMS3600 runs under the IBM 3600 Finance Communication System which is supported by the IBM System/370.

HMS3600 provides device and control functions, accessible via easy-to-use macros which can substantially reduce the burden of installing new 3600 applications. To minimize the need for the application programmers to repetitively code standard/functions such as transaction selection and dispatching, device control, and error recovery, these functions are included in HMS3600. This, in turn, means that user-written coding is reduced and simplified, checkout time is reduced, and redundant coding in certain areas is nearly eliminated.

Additionally, via the *HMS3600 linkage editor and relocatable 3600 code* concept, applications may be developed, programmed, assembled and checked out completely independent of other applications.

After HMS3600 has been link edited with application modules, an input format table and a transaction table, an APB (link edited object code) is ready to associate with configuration data and to transmit to the IBM 3600 controller for either a host connected or stand-alone operation. The IBM 3600 is now ready to execute the applications using distributed function.

Notice GB21-1984 and PDOM SB21-1985.

**TSO PROGRAMMING, CONTROL FACILITY II  
5798-CLW**

This FDP offers the features of the TSO/VS2 Programming Control Facility FDP (5798-BBJ) to users of MVS Release 3.7 with TSO/VTAM, RACF, or the TSO Command Package installed. It has all the features of 5798-BBJ plus:

- TSO command subsetting and program execution control by user.
- File access control by file category and PCF authorization level.
- SMF accounting data optionally recorded for each command and major subcommand
- Use of a semicolon as command delimiter for multiple commands entered per line
- User direct access space control by volume.
- Improved command authorization control
- Volume control enhancements to support multiple volumes per user
- Standardized system interfaces for each of MVS maintenance
- Full SMP support for installation
- Continuous support

This package enhances the functional capabilities of MVS/TSO while providing basic security and integrity features, and complements other new functions such as RACF.

Prerequisite for this FDP is TSO/VTAM Selection Unit or TSO Command Package program product (5740-XT6).

Notice GB21-1987, PDOM SB21-1988, and Systems Guide LB21-1989.

**BILL OF MATERIAL SYSTEM FOR DL/I DOS VERSION 2  
5798-CLY**

This FDP is a set of programs to create, maintain, and retrieve bills of material under DL/I. The input transactions, data base elements, and output maintenance and retrieval reports are all defined and programmed. The user has only to format his data to meet the FDP specifications to use the package. The design is described in the *Manufacturing Data Base Guide - Bill Processor Systems to DL/I GH20-1593*.

Notice GB21-1993, PDOM SB21-1994, and Systems Guide LB21-1995.

**IMS/VS LOCAL COPY II  
5798-CLZ**

This Extended Support FDP provides the user with the capability of causing an image of the data displayed on a local IBM 3277 Model 1 or 2 to be printed on any 3284, 3286, or 3288. This support has been designed and implemented so as to be procedurally compatible with similar support provided for remote IBM 3270 terminals and by IMS 3270 Local Copy.

**Key Functions, Facilities, and Features**

- A local display terminal user can cause the printing of the image of a display screen on local printer (IBM 3284, 3286, or 3288; Models 1 or 2)
- User specifies PA3 or PFK12 keys, which invoke the copy function
- The destination printer may be dynamically altered by the system operator
- The program operates under BTAM or VTAM
- The terminal ID of the requesting terminal is printed
- The operator does not have to wait for any printer action before continuing with further terminal work

Notice GB21-2005 and PDOM SB21-2006.

**CONVERSION AID (EXTENSION):  
DOS/VS 3330/3340 DATA SET  
5798-CNA**

This FDP is an extension of FDP 5798-AMN, which is a prerequisite.

It is a utility program which copies data sets from 3330s and 3340 to either 3330 Model 11, 3350, (compatibility mode) or 3344s. This allows conversion from any IBM DASD supported by DOS/VS Release 32 to any other larger IBM DASD supported by DOS/VS Release 32.

The following data set organizations are supported: Sequential, ISAM, and Direct.

Notice GB21-1996, PDOM SB21-1997, and Systems Guide LB21-1998.

**IMS/VS VIRTUAL STORAGE ANALYSIS (IMSVSAP)  
5798-CNC**

This FDP is designed to assist the systems programmer in an IMS/VS DB/DC installation in the analysis and improvement of IMS/VS performance. IMSVSAP serves as a vehicle to study the effect of paging on overall IMS/VS performance, and in particular on response time.

IMSVSAP produces a detailed page fault report of all paging activity associated with the IMS/VS control region and IMS/VS message regions. A summary report is also provided which indicates the percentage of system page faults and the page faults per second associated with the IMS/VS control region, message regions, and non-IMS related jobs. Another summary report further breaks down the IMS/VS control region page faults into categories by pools, blocks, and code to enable the systems programmer to page-fix the portions of IMS/VS which are affecting response time the most.

Notice GB21-2002 and PDOM SB21-2003.

**MATERIAL REQUIREMENTS PLANNING FOR DL/I DOS/VS  
5798-CNF**

This FDP provides significant new material requirements planning functions to the DL/I DOS/VS user. It performs the basic functions of System/360 Requirements Planning (360A-MF-05X) plus these features:

- Conforms to the standard DL/I manufacturing data base (level one) developed by Manufacturing Industry Marketing.
- Performs single level pegging of gross requirements.
- Provides for time-phased allocations.
- Performs activity chain processing via a DL/I data base.
- Displays requirements planning edit/error messages on the system printer and/or console.

- Utilizes the logical relationship and low-level coding functions of DL/I DOS/VS Version 1.1.

The FDP is a conversion of System/360 Requirements Planning to a native System/370, DOS/VS, DL/I environment. All macros required to generate Requirements Planning are provided. A complete sample problem job stream aids installation and provides the basis for a running system. The data base contains information which is available and meaningful in an online inquiry environment. The FDP is intended for a new user of material requirements planning or for a requirements planning user converting to DL/I.

Notice GB21-2008, PDOM SB21-2009, and Systems Guide LB21-2010.

#### **PROGRAM VALIDATION SERVICES (PVS) UNDER CICS/VS 5798-CNG**

This FDP provides an interface between CICS/DOS/VS and the Program Validation Services (PVS). Through the use of these programs, users of the IBM 3601 Finance Communication Controller may test and debug their 3601 application programs and configuration deck in an interactive environment. This FDP allows PVS to run as a task under CICS/VS, thus not requiring any additional partitions to be allocated. Either VTAM or EXTM (5746-XXB) are supported with local and remote IBM 3270 Information Display System terminals.

Prerequisites are CICS/DOS/VS (5746-XX3) and the IBM 3600 Finance Communication System Host Services Program (5747-BR1).

Notice GB21-2017 and PDOM SB21-2018.

#### **CONVERSION AID: AUTOCODER TO COBOL FOR CMS (ACCAP/CMS) 5798-CNH**

This FDP is designed to aid in the conversion of 1400 series Autocoder and 1401 SPS programs to System/370 COBOL (DOS/VS and OS/VS versions). The FDP executes in a CMS Virtual Machine under VM/370.

The program provides the user all of the functions of the IBM Type II program 1400 Autocoder to COBOL Conversion Aid Program (360A-SE-19X) plus the following new functions:

- Actual addresses for 1401 unit record areas accepted in 1440 programs.
- SELECT and FD statements generated via file control cards to support sequential, indexed sequential, and VSAM files. Either DOS/VS or OS/VS *synnames* are generated for the ASSIGN verb.
- OPEN and CLOSE statements generated via file control cards. Files are opened for INPUT, OUTPUT, and I/O.
- 1400 sense switches set via DOS/VS *UPSIJCL* statement and OS/VS *EXECJCL* statement *PARM* operand.
- COBOL statements scanned and reformatted when required to produce a syntactically correct ANS COBOL source deck. A listing is provided to display all changes to the source deck.

Notice GB21-2022 and PDOM SB21-2023.

#### **OS/VS ONLINE PROBLEM TRACKING 5798-CNJ**

This FDP is designed to assist management in coping with the problems that occur in the DP installation.

Installation hardware and software problems can be entered and maintained in an online environment. An inquiry capability is provided for researching the master problem file for previously encountered occurrences of the same or similar problems. Inquiry responses are provided for individual or multiple symptoms and/or specific dates. An audit trail is provided for view by management's designated problem coordinator.

There are two versions of the program: IMS/VS and CICS/OS/VS. IBM 3270 support is provided for online input and update, and hard copy output of any inquiry response.

Notice GB21-2019 and PDOM SB21-2020.

#### **VTAM INTERFACE TO VIDEO/370 5798-CNK**

This FDP provides a VTAM application program that allows OS VIDEO/370 (5734-RC5) to operate under VTAM. This interface provides all the functions of VIDEO/370 as well as providing for the operation of local 3270, BSC 3270, and 3270 systems operating in SDLC mode.

Notice GB21-2025 and PDOM SB21-2026.

#### **IMS AVAILABILITY REPORTS 5798-CNN**

This FDP produces management-oriented reports which detail the availability of the major components of online system including the IMS control program, 3270 lines, online transactions, and data bases.

The package can either augment a user's existing availability reporting system or provide statistical data required to implement one. Four availability-oriented reports are produced: daily summary, consolidated summary, daily detail, and pseudo-console listing. Each report is concise, easy to interpret, and is designed to focus management attention on potential problem areas. In addition, the consolidated summary report allows the customer to measure overall availability over extended periods of time.

A TSO interface is provided for timely summarizations of availability of remote locations.

Notice GB21-2030 and PDOM SB21-2031.

#### **DOS/VS INCIDENT REPORTING AND TRACKING 5798-CNP**

This FDP is designed to formalize and automate the tracking and reporting of problems within a data processing installation.

It provides for online entry, update and display of current, detailed problem information. Reports are also provided in batch mode for detailed and summary data. The online display is based on selection criteria entered by the user. Some of the categories coded are: department, application, problem type, failing component, system ID, ABEND code, plus others. Space is also provided for user comments.

Notice GB21-2047 and PDOM SB21-2048.

#### **IBM 3790 QUERY PROGRAM 5798-CNR**

This FDP provides the 3790 user with an interactive selection program which allows the user to enter selection and sequence criteria to retrieve data from any data set contained on the 3790 disk. The retrieved records may be sequenced by the IBM 3790 Sort Program (5798-CKA). The number of records selected by the inquiry is displayed, and the user is given the option to display and/or print the data records.

Notice GB21-2035, PDOM SB21-2036, and terminal operator's guide SB21-2037.

#### **STAIRS to ATMS DOCUMENT TRANSFER 5798-CNT**

This FDP enhances the Storage and Information Retrieval System/VS (STAIRS/VS) program product (5740-XR1) to enable a document or a group of documents to be transferred to the peripheral input queue of the Advanced Text Management System (ATMS) program product (5740-XX3). Through the execution of the STAIRS browse command, the FDP will access the text file to retrieve documents selected by the previous search command and copy the document to the ATMS peripheral input queue.

Notice GB21-2038 and PDOM SB21-2039.

### CICS/VS INTERFACE TO CHECK PROCESSING ARCHIVE RETRIEVAL 5798-CNW

This FDP enhances the Check Processing Archive Retrieval System FDP (5798-CHH) to allow the Inquiry program to run under CICS/VS instead of the Check Processing Control System (CPCS). CICS/VS functions will support the 3270 and 3600 systems. Interactive Query and Report Processor (5796-AEH) report, and file and security tables are also provided so a user can make online management inquiries into the data sets maintained by the Check Processing Archive Retrieval System FDP.

Notice GB21-2041 and PDOM SB21-2042.

### THE 3770-P BATCH TRANSMISSION SERVICES 5798-CNXX

This FDP provides a host program that will maintain a library of 3770 function programs and transmit to and receive from the programmable models of the 3774 and 3775. The library maintenance function builds and maintains a VSAM library from the data set created by the Program Validation Services program (BQBLIBI). The transmission function will process function programs, terminal commands, and data through either the Basic Telecommunications Access Method (BTAM) using Binary Synchronous Communications or the Virtual Telecommunications Access Method (VTAM) using Synchronous Data Link Control. This FDP contains all of the function provided by the IBM 3770 Communications Utility (5798-CKZ) plus SDLC support and other minor enhancements.

Notice GB21-2044, PDOM SB21-2045, and systems guide LB21-2046.

### 3770 SORT PROGRAM 5798-CNY

This FDP sorts 3770 user data sets on the 3770 instead of on the HOST system. It accepts as input the SORT key and a reference back to the source data. The FDP sorts in either ascending or descending sequence ... uses sort key lengths of 8, 16, 32 or 64 ... sorts user data or new data being entered from a terminal. The program sorts user indexes so that user-indexed data sets may be accessed using binary search techniques.

Notice GB21-2050 and PDOM SB21-2051.

### DOS/VS 3540 DISKETTE UTILITY 5798-CNZ

This FDP is a generally applicable utility program for the 3540 Diskette I/O unit.

Functional utilities available in addition to normal card, tape, diskette, and printer utilities provide the facility to examine, alter, and modify diskette data files used in both testing and production environments.

Additional utilities provide the ability to perform full track read and write for 3540 I/O, emulate 3747 function, display records on the console, free format for multiple input parameters, allow control card input for function specification.

Notice GB21-2056 and PDOM SB21-2057.

### 3790 DISK UTILITY 5798-CPA

This FDP provides the following functional utilities for the 3790:

- Display and/or print indexed records in both hexadecimal and character format. All sectors or multiple records can be displayed and/or printed.
- Display and/or print relative records in hexadecimal and character format. One record, a range of records, or a whole file may be retrieved.
- Display and/or print packed transaction records in hexadecimal or character format. Packed transaction records may be deleted, put in hold status, or put back in transaction data set for repacking.
- Add or delete records from indexed or relative data sets.

- Change contents of existing indexed records and relative records.
- Scan relative data sets for any occurrence of user-specified four bytes of data.

Notice GB21-2053 and PDOM SB21-2054.

### MVS/TSO/VTAM DATA SET PRINT 5798-CPF

This FDP enables a TSO user to have a specified data set directed to any 3284/3286/3288 Printer or 3790 Print Data Set that is attached and defined to the VTAM network.

The program is intended for use only on TSO/MVS systems that have a VTAM network. The system environment can be either VTAM only or mixed TCAM and VTAM, but the designated printer must be under control of VTAM.

The program provides the same facility to the TSO/VTAM user that the TSO Command Processor, 5798-AYF, provides to the TCAM-only TSO user.

Notice GB21-2069, PDOM SB21-2070, and Systems Guide LB21-2071.

### PRODUCTIVITY AID: 3790/3770 PVS DATA SET TEST SUPPORT 5798-CPG

This FDP is designed to increase the productivity of 3790/3770 application programmers. Its use can simplify the testing effort and reduce the time required for debugging application programs. The program creates, from user input data and control statements, a VSAM file to use as a simulated 3790/3770 dataset when testing application programs.

Previously, under the 3790/3770 Program Validation Services (PVS), the user would create simulated datasets for program testing by one of two methods: either by writing another 3790/3770 program to create the dataset or by writing a batch program to create a VSAM file properly structured for PVS.

Customers installing 3790 Controllers or Programmable 3770 Terminals and using Program Validation Services (PVS) to develop and maintain their application programs are potential users of this FDP, which is designed to:

- Improve the productivity of application programmers by eliminating the need for an extraprogram to load files for testing.
- Eliminate the need to write VSAM load programs to test each application system by implementing a generalized utility program.
- Allow the user to create a *baseline* set of 3790/3770 files for regression or recurrent testing during the life of an application program.
- Document, by a printed listing, the contents of the 3790/3770 dataset prior to the test.
- Accept as input either tape or disk sequential files or a card *image* file. These tapes are blocked together to create a record of the proper length.
- Using the card input capability, extend to the CMS, VSPC, TSO, and ETSS users the capability to create test files and prepare and submit batch tests for 3790/3770 application programs from their terminals.

Notice GB21-2073 and PDOM SB21-2074.

### POWER/VS RJE CONTROLLED ACCESS MONITOR 5798-CPH

This FDP is designed to allow a DOS/VS POWER/RJE Host system to restrict the data sets and programs which a remote terminal can access for processing through DOS/VS. The interface to POWER/VS is provided through the reader exit facility in the *POWERmacro*. Users currently using a reader exit may continue to do so by linking this FDP to their current exit routines.

This FDP consists of a monitor program which scans job control statements for DLBL, EXEC, STDLABEL, and PARSTD cards. Any attempt by a remote station to change the permanent area on the label cylinder, access a data set not authorized by the user, or execute a program not authorized by the user will result in that job being flushed from the POWER/VS input queue.

In addition to the monitor program, three other macros are provided to generate a remote station control table (RCT), a program (phase) control table (PCT), and a file (label) control table (FCT). The RCT is used to determine which entries in PCT and FCT a remote station is allowed to execute or access. Changes to the monitor and/or tables can be made by recoding the macros and cataloging the new program. The new program becomes effective at POWER initialization.

Notice GB21-2066 and PDOM SB21-2067.

#### **GRAPHICAL DISPLAYS - CICS/VS 5798-CPJ**

This FDP will accept, from a user-application program, captions and a series of fixed-point numbers. The numbers will be scaled and displayed on a 3270, along with the caption, in a graphical representation. The graphical screen can then be copied to a 328X printer for hard copy. The program will accept up to 60 values for plotting. Maximum graph size is 20 rows by 60 columns.

Notice GB21-2076 and PDOM GB21-2077.

#### **FORMAT/3800 5798-CPN**

This FDP allows the user a quick and simple method of preparing pre-printed or formatted forms using the FORMAT character set of the 3800 Printing Subsystem. Using as input cards that describe only the extreme starting and ending points of horizontal and vertical lines, the program will uniquely determine the location and type of any intersection and produce a COPY MODIFICATION module for the formatted page. Also produced will be a sample of what the form will look like, which may be printed on a normal impact printer. Optionally, ECBDIC text may be included.

Notice GB21-2082 and PDOM SB21-2083.

#### **MVS/SMF PROBLEM PROGRAM ACTIVITY REPORT PROGRAM 5798-CPP**

This FDP selectively extracts and summarizes performance related data from SMF records. Each of three system resources, CPU, storage, and I/O, are reported on. Reports summarize the data into SMF Step End Summary reports, an SMF Job End Summary report, a non-VSAM I/O report, and a VSAM Data Set Activity report. An optional SMF step end summary report is provided if the Supervisor Performance #2 selectable unit is installed.

Notice GB21-2089 and PDOM SB21-2090.

#### **CONSOLE SPOOLING UNDER POWER/VS 5798-CPQ**

This FDP collects the console messages generated in a POWER/VS controlled partition and prints them out on a line printer, following the normal printed output for the job.

Many DOS/VS users find that it is difficult and awkward to obtain information from the DOS/VS console. In many cases, vital debugging information is printed only on the console (SYSLOG) and not on the user's printout (SYSLSST).

Providing the user with automatically generated console messages can improve programmer productivity, decrease the time required to determine why a job failed, and minimize the number of times the computer operator is interrupted with requests to locate previous console entries. Console messages can be automatically routed to the submitting RJE terminal.

CICS Source Program Maintenance Online II (5798-CFT) users can display their console listings on a local or remote 3270 Display Station.

Data processing managers and auditors may find the printed output provides valuable audit and control information showing which jobs were executed, when they were executed, and which devices were accessed.

Notice GB21-2084, PDOM SB21-2085, and Systems Guide LB21-2086.

#### **PRODUCTIVITY AID: SYSTEM FOR GENERALIZED PERFORMANCE ANALYSIS REPORTING (GPAR) 5798-CPR**

GPAR, an extended support FDP, is the nucleus of a family of IBM products that assist in the analysis of performance of major hardware systems, system control programs, communications and DB/DC systems. The GPAR family provides a simpler, more efficient approach to the complex problems of performance analysis.

GPAR reads any performance data source only once and passes it to its dependent programs. This reduces the I/O and CPU time required for processing and simplifies operating the system. Other IBM products function under GPAR control to provide reports for the specific system being analyzed such as the SCP, communications, or DB/DC system. GPAR aids are also provided to assist the user in creating assembler language programs, graphs and distributions that further tailor reports to his needs.

##### **Key Functions, Facilities, and Features**

- Provides a base for an IBM-supplied family of report programs as well as user-written report programs.
- Provides common user access to all GPAR-dependent report programs
- Reads sequential input files
- Single scan of input files with no sorting
- Includes SYNAD and STAE routines
- Prints user-tailored graphs defined at execution time
- Permits user exits from graph module
- Provides report program development aids

Notice GB21-2091, PDOM SB21-2092, and Systems Guide LB21-1794.

##### **RELEASE 2.0**

The System for Generalized Performance Analysis Reporting (GPAR) is a productivity aid which is the base for application-specific performance analysis sub-systems including IMSASAPII (5798-CHJ), IMSPARS (5798-CQP), GTFPARS (5798-CQQ) and VTAMPARS (5798-CTW).

Release 2.0 provides the following new functions:

- VSAM data set support
- Parallel access loader (PAL)
- Distribution record processor
- Execute command chaining
- GPAR programmer's guide
- Error correction and minor report format improvements

By itself, GPAR provides facilities that can assist the writer of reporting programs and thus reduce cost and improve program quality.

A GPAR programmer's guide describes GPAR functions, macros and subroutines and illustrates how to use these programming productivity aids in the preparation of user-written reporting programs.

Notice GB21-2091, PDOM SB21-2092-2, Programmers Guide SB21-2500, and Systems Guide LB21-1794-1.

#### **3614 CONSUMER ONLINE TRANSACTION SYSTEM EXTENDED APPLICATION SUPPORT 5798-CPT**

This FDP provides the same capabilities as the 3614 Consumer Online Transaction System with Advanced Function Support, FDP 5798-CGY, plus enhanced 3614 support.

It supports the coexistence on the same 3600 controller of 3614s using DES (Data Encryption Standard) and those using the original 3614 encryption technique, AET (Alternate Encryption Technique).

It provides, in the 3600 controller, the same application and device support for the 3614 (DES) that is available for the 3614 (AET). It also supports the DES Expanded Function Feature, which includes transaction chaining, journal printing, and check cashing.

Other enhancements provided for both versions of the 3614 are dual denomination, multiple 3614 load images, expanded 3614 error recovery, and increased efficiency of 3600 program code.

The FDP also supports multiple institutions (interchange support). This makes it possible to identify permissible transaction types by particular financial institutions, allowing 3614s of different financial institutions to be attached to the same 3600 controller.

#### **RELEASE 2.0**

This release extends the capabilities of the 3614 Consumer Online Transaction System. The FDP provides a high level of support for the IBM 3614 Consumer Transaction Facility. Support is provided for both on-host and off-host operations.

This program supports the coexistence on the same 3600 Finance Communication Controller of 3614 machines using DES (Data Encryption Standard) and 3614 machines using the original 3614 encryption technique which is referred to as AET (Alternate Encryption Technique).

New features provided with Release 2.0 include:

- 3602 Disk Support - The authorization file can be resident on either the 3602 disk or the 3600 controller one- or two-sided removable diskettes. A batch program is provided to sort customer account number entries by 3602 record sequence number for a 3604 disk-resident authorization file.
- 3600 IR4 Support - The 3600 application program supports IR4 and the IR4 3614 Hard Error Recovery Facility. This new facility is used to indicate the recovery action that should be taken after a hard failure causes a 3614 to close.
- 3600 Storage Expansion Feature (#6501) Support - The 3600 application program supports the new IR4 assembler function (split option) in which constants and instructions are separated into individual control sections.

Notice GB21-2093, terminal user's guide SB21-2096, PDOM SB21-2094, and TNL (LN20-6503) to system guide LB21-2095.

#### **BANK COMPARISON APPLICATION FOR TREND ANALYSIS/370 5798-CPW**

This FDP consists of programs and data sets for use in implementing an application to compare bank performance under Trend Analysis/370 (5740-F12). That program, with or without its System/7 Color Graphics Support Feature (5707-F12), is a prerequisite.

The application utilizes the Board of Governors of the Federal Reserve System's *Reports of Condition and Reports of Income* data for insured commercial banks and their consolidated domestic subsidiaries, which are available from the Federal Reserve System in machine-readable form. Users of the application must subscribe to that service.

The application serves a two-fold purpose. First, it makes available to executives useful information from published bank statements through Trend Analysis/370 and its System/7 Color Graphics Support Feature, in tabular and graphic forms. Secondly, the materials supplied with the application can serve as a prototype for development of other applications. For the new Trend Analysis/370 user, the application can be quickly and easily installed, perhaps as the first application under Trend Analysis/370, and thereafter, the application documentation can also provide a useful example for the development of subsequent applications. Trend Analysis/370 provides facilities for data security and protection.

Notice GB21-2097, PDOM SB21-2098, and Systems Guide LB21-2099.

#### **VM/370 PERFORMANCE MONITOR ANALYSIS 5798-CPX**

This FDP enables VM/370 systems analysts and administrators to obtain reports and graphs portraying the performance and utilization of a running VM/370 system. The FDP uses data collected by the VM/370 MONITOR command. It requires little previous knowledge of

VM/370 and should be of value to new VM/370 installations as well as to experienced users.

#### **Highlights:**

- One pass reduction of multiple MONITOR tapes.
- Creation of condensed history files for further analysis.
- Defaults apply when user specifications are omitted.
- Parameter driven - no programming or recompilation.
- Comprehensive plot subsystem with user control options.
- Two MONITOR sessions can be compared on one plot.
- Documentation describes all phases and includes a walk-through section on Performance Analysis.

Notice GB21-2100 and PDOM SB21-2101.

#### **RELEASE 3**

This new release of 5798-CPX contains support for VM/Systems Extensions (SEPP) 5748-XE1 and VM/Basic System Extensions (BSEPP) 5748-XX8 monitor data, enhanced processing of spool files, ACUM files and reports, plus error correction to Release 2.

The following new functions are available:

- Facilities to assist users in creating subsets of ACUM history files.
- A program to sequentially page number a set of VMAP reports.
- A new PROFILE EXEC for automatic data reduction of Monitor Spool files.
- Facilities to uniquely identify ACUM files based on the creation date and time of the original monitor data.
- A three-part report reflecting feedback information on the Resource Manager of the SEPP and BSEPP program products.
- Two additional SEPP reports: one summarizing migration activities, the other presenting shadow table maintenance activities.

Availability notice GB21-2100 and PDOM SB21-2101-3.

#### **FILE CABINET OPTION 5798-CPY**

This FDP offers the user a new online option in handling data currently destined for printing or microfiche/film. The functions provided can be used to reduce operational costs associated with printing and computer output microfilm, as well as increasing availability, end-user productivity, and data security.

The FDP captures designated output data sets from the JES2 Spool and stores or archives them to the IBM 3850 Mass Storage System, 3330, 3340, or 3350 DASD Facility. This data, which is printed or microfilmed today, can then be viewed via an IBM 3270 terminal system and reprinted on demand. Powerful terminal commands aid the user in viewing authorized output images either to answer inquiries directly from the online data or to request reprint of individual pages, range of pages, or entire data sets.

Notice GB21-2103, PDOM SB21-2104, and systems guide LB21-2105.

#### **PRODUCTIVITY AID: TPNS SCRIPT GENERATOR 5798-CPZ**

This FDP allows the Teleprocessing Network Simulator (TPNS) (5740-XT4) to simulate an actual production environment for IMS, CICS, TCAM (TSO), VTAM, and other online systems. From a user-created log tape, this FDP produces TPNS script statements for input into a TPNS test run, substantially reducing the effort in using TPNS.

The FDP can reproduce production system workloads, and help identify most problems without impacting the end user, thus improving productivity. It is particularly valuable in the following areas:

- Testing/evaluating new releases of online systems.
- Identifying performance variables and evaluating corrective action.
- Testing system maintenance changes.
- Testing application changes.
- System performance for benchmarking/evaluation purposes.

Notice GB21-2106 and PDOM SB21-2107.

### ATMS II SUPPORT FOR THE 6640 DOCUMENT PRINTER 5798-CQA

This FDP provides ATMS II (5740-XXV) support for the 6640 Document Printer as an input/output device. The 6640 provides the ATMS II user with a quiet, high quality ink jet printer, plus offline document storage on mag cards. The FDP provides the ATMS II operator with easy-to-use commands, including *send*, *receive*, *queue*, *list*, and *delete*. The FDP creates a new ATMS II formatter allowing the ATMS II operator to use most of the document formatting facilities of ATMS II and properly handle the 6640 special codes and Operator Control Language (OCL).

Notice GB21-2109 and PDOM SB21-2110.

### 3760 BATCH DATA TRANSFER UNDER CICS/VS 5798-CQB

This FDP is a data transmission aid for the data entry configuration of the 3790/3760 communication system, and runs as a task under CICS/VS using either EXTM, TCAM-10, or VTAM. The FDP initiates the transmission of jobs from one or more 3791/3760 controllers to the System/370 host. Jobs are written on sequential tape or disk files at the host system for further processing by user-written programs. The information received can either be printed on a line printer, a console, or a 3284/3286 printer, or returned to the initiating terminal.

Six types of jobs are supported by the FDP:

- Route Job - Messages are entered via the dual entry station.
- List Job - Records of complete format definition created by the data entry supervisor.
- Print Job - Records of complete format screen images entered by the data entry operator by means of the 3790 *copy* command.
- Report Job - A statistical report about dual key entry station operations.
- Data Job - Data entered from dual key entry stations that are to be used as input for user-written programs at the host.
- Reverse Extract - Data sent from the host from a data set to the 3791 storage for later correction/editing.

Notice GB21-2112 and PDOM SB21-2113.

### 3660 ADVANCED SCHEDULING ENVIRONMENT FOR CICS/VS 5798-CQC

This FDP, which provides batch communication support for the 3660 Scanning and Key Entry Supermarket Systems, is the same as FDP 5798-CJQ, except that CICS/VS is utilized as the communication base.

Notice GB21-2115, PDOM SB21-2116, and Systems Guide LB21-2117.

### CICS/VS MVS PEER ADDRESS SPACES 5798-CQE

This FDP facilitates the running of multiple copies of CICS/VS in an MVS environment. It helps users to realize the performance potential of a multiprocessing environment (AP and MP configurations). This is achieved by distributing the function over multiple copies of CICS/VS.

One copy of CICS/VS (designated as the DC copy) is concerned primarily with controlling the terminal network. It passes transactions via this FDP to the other copies of CICS/VS (designated as TX copies) for processing. Terminal I/O requests in the TX copies are intercepted and passed to the DC copy for execution.

The FDP and this concept of operation offer greater CICS/VS system protection from errant application programs. New applications, for example, can be brought up in their own TX copy of CICS/VS, but still use the same terminal network which supports the production system.

All MVS CICS/VS users (including UP configurations) can benefit from this aspect of the FDP.

All copies of CICS/VS can retain the capability to perform all CICS/VS functions. The DC copy can process transactions, and the TX copies can control additional terminals at the user's option.

Notice GB21-2121 and PDOM SB21-2122.

*Special Marketing Instructions: Marketing representatives considering proposing this FDP should review their plans with the Palo Alto Systems Center.*

### FINANCIAL INFORMATION SYSTEM 5798-CQF (BACIS) FINANCIAL INFORMATION SYSTEM 5798-CRW (ONLINE BACIS)

#### CQF

This FDP will record, accumulate, and present financial data by source, organizational unit, project, fund, function, activity, line item, object code, or other user determined classifications. This permits revenue and expenditure analyses to be accomplished by function or other categories as well as by departmental or object code account structures.

This function has previously been available to DOS users via the BACIS program product (5736-G25). This FDP provides similar function for the OS/VS user with options for VSAM data sets or root only IMS data bases. If necessary, ISAM data sets may also be used. Suggestions for adaptation to hierarchical data bases are also provided.

#### CRW

This FDP provides online terminal access to the financial files created and processed by the prerequisite FDP, Financial Information System/BACIS (5798-CQF). It provides online updating of budget preparation records in conjunction with the budgeting subsystem of the base product and inquiry capability for the balance forward, open item, vendor activity, and the accounting transaction records.

It operates under CICS/VS and uses the features of the IBM 3270, including light pen. It requires CICS/OS/VS (5740-XX1) and Financial Information System/BACIS FDP (5798-CQF).

CQF notice GB21-2123, PDOM SB21-2124, and systems guide LB21-2125. CRW notice GB21-2209, PDOM SB21-2210, and systems guide LB21-2208.

### PRODUCTIVITY AID: HDAM SEQUENTIAL RANDOMIZER GENERATOR 5798-CQG

This FDP analyzes a set of data base keys and generates a load module that can be used by IMS DB, 5740-XX7. The randomizer generates DASD addresses which are in the same relative sequences as the data base key, providing the capability of retrieving data base records from an HDAM data base in ascending logical sequence by processing the data base sequentially.

Notice GB21-2126 and PDOM SB21-2127.

### CONVERSION AID: SYSTEM/3 TO SYSTEM/370 5798-CQH

This FDP is designed to assist in the transition from System/3 CCP to System/370 CICS/VS, and should reduce the time required for the conversion by eliminating the routine, repetitive aspect of the task. System/3 DFF screen maps are converted to equivalent System/370 CICS/VS maps, CCP duplication function is supported, field names are edited to meet COBOL conventions, and autoskip fields are generated if necessary.

Notice GB21-2128, PDOM SB21-2129, and Systems Guide LB21-2102.

### CONVERSION AID: SYSTEM/3 OCL TO SYSTEM/370 DOS/VS JCL 5798-CQJ

This FDP is designed to assist System/3 users in converting their Operating Control Language to System/370 DOS/VS Job Control

Language. It reads OCL statements, analyzes them, and makes the appropriate conversion to JCL. It issues warning messages when no JCL counterpart exists or when an inconsistency is detected. It also takes advantage of user-supplied tables to correlate System/3 and System/370 devices and data set names with DOS/VS system numbers. The FDP is written in DOS/VS Assembler and employs device independent techniques and VSAM.

Notice GB21-2130 and PDOM SB21-2131.

### **3614 USAGE REPORTING SYSTEM 5798-CQK**

This FDP provides data to a financial institution's management, planning, and marketing personnel to assist them in evaluating the usage made of their 3614's and planning future installations. Data is provided in both graphic and statistical form to assist in:

- Development of new business.
- Tracking the success of the 3614 system.
- Measuring the impact of advertising campaigns.
- Predicting activity levels at 3614 installations.
- Measuring work offloaded from tellers.
- Creating forecasts of 3614 usage levels.
- Comparing 3614 usage between branches.

The programs can be run daily, weekly, monthly, or for any desired period to provide a broad spectrum of reports reflecting 3624 usage both graphically and in statistical form.

Notice GB21-2132 and PDOM SB21-2133.

### **TELLER STATISTICS SUBSYSTEM 5798-CQL**

This FDP produces meaningful graphs and reports from activity information of an online teller system. The graphs show peak times and slack times and assist in teller scheduling. The reports break down teller information into types of transactions with functional areas, such as 'on-us checks cashed' and 'savings split deposits.'

Information is totaled and summarized for each of several tellers, branches, and banks. Analysis can be for a single day, a list of days, or a range of days and for any given time period within the day. In addition to the wide range of measurement facilities, the subsystem continually helps show other benefits of an online teller system.

Notice GB21-2134 and PDOM SB21-2135.

### **GIS/VS 3270 FORMATTING AID 5798-CQN**

This FDP is designed to assist the user of GIS/VS in an IMS/VS terminal environment. The user is provided with a series of 3270 IMS/VS screen formats which guide him through a terminal session and enable him to enter GIS/VS queries easily. Screen formats are provided which help him enter queries from a skeletal 3270 screen, edit queries, and maintain the GIS/VS task data base, call a GIS/VS 'HELP' function, and review user data base segment and field names as defined to GIS/VS.

The FDP enables users to converse with the system to submit data base queries. A tailoring facility lets users standardize queries in any form desired. Users are able to concentrate on the logic of their queries instead of syntax requirements.

Notice GB21-2137 and PDOM SB21-2138.

### **IMS/VS PERFORMANCE ANALYSIS AND REPORTING SYSTEM (IMSPARS) 5798-CQP**

This extended support FDP is a performance analysis and tuning aid for ISM/VS DB/DC systems. IMSPARS is a tool for management as well as for system programmers and technical support personnel. It provides management-oriented summary reports, as well as detailed information reports for those directly involved in improving system performance. The reports are derived from the IMS/VS log tape and provide information in the areas of transaction response times, IMS/VS system resource usage, IMS/VS system resource availability.

When used in a regular manner on a regular basis, IMSPARS can help the user to:

- Improve transaction response times.
- Make more efficient use of IMS/VS regions and message queues.
- Reduce virtual and real memory requirements in buffer pools.
- Increase availability of IMS/VS resources.
- Provide preinstallation evaluation of applications and programs against system standards.
- Provide on-going system measurement and management reporting capability.
- Improve productivity of analysts and programmers.
- Assist in determining future system requirements.
- Reduce the need to run IMS/VS utilities.

Availability notice GB21-2139 and PDOM SB21-2140.

### **GENERALIZED TRACE FACILITY PERFORMANCE ANALYSIS 5798-CQQ**

This extended support FDP generates a comprehensive set of reports for OS/VS users that may be used in performance analysis and as a tuning aid for OS/VS systems. Input to GTFPARS is the output from the Generalized Trace Facility (GTF), and output reports include job summaries, system summaries, detail traces and other special reports.

When used in an appropriate manner, and on a regular basis, GTFPARS may help to:

- Provide system performance evaluation data
- Aid in system tuning efforts
- Assist in the evaluation of application programs
- Reduce the need to run a number of different, limited function GTF analysis programs.

Notice GB21-2142 and PDOM SB21-2143.

### **VS APL FINANCIAL PLANNING SYSTEM 5798-CQT**

This FDP will be useful to the financial analyst who needs to obtain printed financial reports with quick turnaround. Functions provided are:

- Interactive design of financial reports.
- Terminal data entry and editing.
- Interactive definition of the financial calculations to be performed including both APL code and/or and of the financial, arithmetic, and forecasting routines of FPS.
- Execution of the financial algorithms which the user has defined.
- Printing of the financial report.
- Consolidation of financial reports (e.g., produce a corporate report by consolidating divisional reports).

Notice GB21-2148, PDOM SB21-2149, and systems guide LB21-2150.

### **THE 3890 DOS/VS CYCLE SORT 5798-CQX**

This FDP provides the software required to sort On-us items into the following general categories (based on input from the user's Demand Deposit Accounting system):

- Items requiring special handling.
- Signature verification items.
- High item-volume items.
- Items sorted by statement cycle for bulk filing.

Software for the 3890 Document Processor features:

- 3277 Display Station for control of 3890 functions.
- Full restartability with restart display.
- Jam display.
- Status display of current status of 3890 including item and reject statistics.
- Asynchronous tasks for 3890 and 3277 allow

resumption of reading when 3890 is made ready,  
without operator action at 3277.

Reports are provided which show the distribution of low-speed items  
and the intended distribution of items rejected during the cycle sort.

Notice GB21-2165 and PDOM SB21-2166.

#### **CICS/VS FORMATTED TRANSACTION DUMP - ONLINE 5798-CQY**

This FDP makes CICS/VS transaction dumps available to online  
CICS/VS users in formatted mode for display and analysis on a 3270  
terminal with optional CICS transaction security.

Availability notice GB21-2156 and PDOM SB21-2157.

#### **PRODUCTIVITY AID: 3770/3790 ASSEMBLER LISTING POST EDITOR 5798-CQZ**

This FDP edits 3770/3790 assembler listings to assist in improving  
their readability and their usefulness in debugging, tuning, and  
maintaining 3770/3790 user programs. Principal features include:

- For first level macros, the macro generated location address and  
object code is moved from the macro expansion statement to the  
macro statement, and the macro expansion statement is eliminated.
- For both user and IBM supplied second level macros the macro  
generated first level macros are shown in the listing instead of the  
first level macro expansion statement.
- Effective addresses are generated for branch type instructions.
- Sector boundaries are flagged in the listing.
- The op-code mnemonic of the referencing instruction for each  
reference in the cross-reference listing is added to the cross-  
reference table.
- Duplicate references in the cross-reference listing are eliminated.

Notice GB21-2159 and PDOM SB21-2160.

#### **MATERIAL REQUIREMENTS PLANNING FOR DL/I DOS/VS ENHANCEMENTS 5798-CRA**

This FDP provides online display and maintenance of data developed  
by FDP 5798-CNF. Provided is online display of an item's time-phased  
material plan, pegged requirements, action messages, and planning  
factors. Optionally, the user can perform the following online maintenance:

- Firm Planned Orders - The user can convert planned orders to firm  
planned orders changing and firming release dates and order  
quantities. New firm planned orders can be created and existing  
ones deleted. FDP 5798-CNF is modified to support firm  
date/quantity planned orders, including the special case of a zero  
firm planned order.
- Master Schedule Changes - The User can add, delete, or change an  
item's independent demand gross requirements.
- MRP Planning Factors - The user can change an item's MRP  
planning factors.
- MRP Action Messages - The user can delete or annotate action  
messages generated by MRP.

Whenever any of the above changes to an item are recorded, trigger  
records are entered into the activity chain data base. The trigger  
records - on a daily basis - can be input to the material requirements  
Alteration program provided by FDP 5798-CNF. Alteration processing  
generates a new material plan for only the items that are changed. The  
result is an updated online material and priority plan.

Notice GB21-2162 and PDOM SB21-2163.

#### **BUSINESS GRAPHING ON THE 3800 5798-CRB**

This FDP with its new functions creates a new dimension for providing  
information to the end user. Normally, the output from impact printers  
is tabular data or text and, until now, the printing and integration of  
business graphs and charts into reports has not been practical.

This FDP utilizes new functions of the 3800 Printing Subsystem to  
provide the capability to generate graphs as part of printing reports.  
The resulting graphs can represent multiple plot lines with identifying  
text and references.

The use of business graphs may enable the end user to more  
effectively utilize information by obtaining a visual representation of  
relationships and trends.

Notice GB21-2167, PDOM SB21-2168, and Systems Guide LB21-  
2168.

#### **THE 3890 ONLINEFINE SORT - OS/VS/CPCS 5798-CRC**

This FDP is designed to improve fine sort productivity by eliminating  
one or more document passes per run and by processing multiple  
banks and related control documents in a single run, resulting in  
reduced setup and handling. Sorting is achieved by host program  
communication with 3890 SCI using pocket assignments calculated at  
the host.

Facilities of this FDP include radix sorting (number compression by  
assigning an alias and base number conversion of the alias); image  
matching; multiple sort specifications per run; high volume account kill;  
divider insertion; processing of on-us tracers and bank control  
documents; operator communication via CRTs; restart/recovery; high  
volume accounts report and sort statistics report.

Notice GB21-2170 and PDOM SB21-2171.

#### **MVS SECONDARY OPERATOR FACILITY 5798-CRE**

This FDP provides facilities to simplify MVS console operation and  
reduce the possibility of operator delays and errors. The FDP runs as  
an MVS job and has two major functions: Command/Job Procedure  
Processing ... Time-of-Day Event Scheduling.

Command/Job Procedure Processing allows operators to request  
execution of complex procedures containing OS/MVS, JES, VTAM  
and/or TCAM commands. Parameter substitution and control logic  
facilities are provided. Procedures may submit jobs to MVS for  
execution.

Time-of-Day Event Scheduling will automatically submit production  
and/or backup jobs for execution at dates and times specified by the  
user. A checkpoint/catch-up facility covers the possibility that the  
system is down at the requested schedule time. Command procedures  
and write-to operator messages may also be executed at specified  
dates and times.

Notice GB21-2179, PDOM SB21-2180, and systems guide LB21-  
2181.

#### **IBM 3790 DISKETTE UTILITY 5798-CRF**

This FDP provides the following utility functions on a 3791 Controller.

- Load and restore 3790 indexed and relative data sets using  
diskettes formatted for 3790 Batch Data Exchange (BDE).
- Unload and restore 3790 user data sets to 128 byte diskettes in a  
format defined by the FDP for better space utilization.
- Allow 3790 operator to build on a diskette, records that will create  
DSCBs, delete DSCBs, and delete programs under control of  
SYSBDISK.
- Display, print, or change 128 byte diskette records.
- Abend dump diskettes created by SYSBDISK are formatted and  
printed in a report. Indicators, registers and save areas are  
formatted and printed.

Through a combination of the above functions, backup and reconstruction of 3790 files may be accomplished without host intervention, with other 3790 programs executing concurrently.

Availability notice GB21-2182 and PDOM SB21-2183.

### **3790 KEY SEQUENTIAL FILE MACROS 5798-CRG**

This FDP provides important functions which are not available with the standard 3790 programming language. These functions include retrieving small records (1 to 256 bytes), executing an exact or generic search by key for a record, and allowing records to be read sequentially, starting at any key. Emphasis is on high speed, efficient retrieval.

The files read by the retrieval macro are initially loaded onto 1 to 4 relative data sets in a special format by file-writing macros. Two of those are supplied; one executing in the 3790; and one executing in the host computer, in which the formatted blocks of the files are developed in a form suitable for transmission to the 3790. No capability is provided for inserting additional records into a file once it is formatted for retrieval purposes.

Notice GB21-2176 and PDOM SB21-2177.

### **ATMS II FONT CHANGE COMMANDS FOR THE 3800 5798-CRH**

This FDP provides additional capabilities for inhouse publishing using ATMS II and the 3800 Printing Subsystem.

High quality output with mixed fonts, which may be suitable as final composed copy, can be generated using this FDP. Simple font change controls can be embedded in the original text which will cause the text to be printed using the font specified when output to the 3800. New character sets provided include eight 12-pitch and one 15-pitch which allow 20% or 50% greater page density respectively.

Additionally, the nine new character sets provided can be used by themselves without ATMS II for other existing or new 3800 printer applications.

Notice GB21-2184 and PDOM SB21-2185.

### **PL/I PROGRAMMING 5798-CRJ**

This FDP is a computer-based training course designed to teach the programmer with no prior knowledge of PL/I enough of the language to program a wide variety of applications. All but the most advanced facilities of the language are covered.

In addition to the tutorial material, the course contains three intermediate quizzes and one final quiz.

A set of problems that parallel the material are also included to give the student an opportunity to make use of the material covered.

Notice GB21-2187, CD/AM SB21-2188, and student materials SB21-2189.

### **IBM 3800 INTERACTIVE CHARACTER DESIGN 5798-CRK (ATMS) 5798-CTJ (TSO) 5798-CTH (CMS) 5798-CTK (VSPC)**

These FDPs provide the JCL and the data initiation facility to allow the online creation of characters for the IBM 3800 Printing Subsystem. Prestructured dot matrices are provided for each of the three standard pitches used for the IBM 3800 (10, 12, and 15 pitches). The matrices also contain design guidelines (center lines, normal character location lines) and pitch boundary design limits to aid in character creation while avoiding out-of-boundary error conditions. Using the different modules of the program, any user of an IBM program with an interactive source program editing capability (ATMS, CMS, TSO, or VSPC) can easily develop graphic character modification modules, update SYS1.IMAGELIB, create or change character arrangement tables, and create or change COPYMODs to use or test standard characters or special characters, such as signatures or logos.

Notice GB21-2191, PDOM SB21-2192, and systems guide LB21-2193.

### **PURCHASE VS. LEASE UNDER PLANCODE/I 5798-CRN**

This FDP is an interactive, conversational, financial planning model that utilizes the power and speed of an online computer to aid the decision maker in evaluating the most economical way to acquire capital equipment.

The user is provided with the capability of executing multiple iterations of a purchase/lease analysis, in a what if environment, interactively changing input assumptions from a terminal.

Cashflow and profit and loss impact reports provided as output from each execution.

Purchase vs. Lease runs as a model under PLANCODE/I and does not require any additional hardware or software other than what is required to execute PLANCODE/I.

The user is not required to have any programming knowledge, but needs to be familiar with the financial terminology of a purchase vs. lease analysis.

Notice GB21-2197 and PDOM SB21-2198.

### **REMOTE IBM 3600 CONTROL FACILITY 5798-CRR**

This FDP permits an operator or systems programmer at one 3601 to place any other 3601 in the same network in control operator mode and perform system modification, debugging, and other control operator functions. It is intended to permit a programmer, using a 3604 attached to a 3601 controller at the central site, to perform problem determination, data display, program modification, and other control functions on 3601 controllers which are remotely located.

The program consists of two parts: a local program runs on the 3601 at the central site and contains most of the function and a remote program which resides in the remote controller.

The program will operate with either IMS/VS or CICS/VS as the host DC system. It will be licensed to any controller on which the local program is executed.

Notice GB21-2206 and PDOM SB21-2207.

### **DMS/VS DL/I Manufacturing Functions 5798-CRY**

This FDP enhances DMS/VS by extending DMS/VS to support the manufacturing DL/I data base retrieval and maintenance. The FDP allows the user to generate DMS/VS user exits and object code for the following manufacturing functions:

- Single Level Retrieval
- Indented Retrieval
- Copy Same As
- Low Level Code/Continuity Check
- Renumber
- Validate Logical Parent

Notice GB21-2213 and PDOM SB21-2214.

### **IBM BRAILLE UTILITIES 5798-CRZ**

This FDP converts machine-readable EBCDIC data sets into a correspondence braille code to be embossed on IBM impact printers with appropriate braille RPQs attached.

The FDP is designed to provide visually-impaired braille readers employed in electronic data processing activities with access to information normally available through computer printouts. These computer printouts might include many conceivable types of listings generated during the course of job-related activities: reports, program listings, machine-readable text, etc.

Notice GB21-2215 and PDOM SB21-2216.

**THE 3800 UPC PRINT  
5798-CTA**

This FDP provides the capability of printing universal product codes (UPC) on the 3800. A multi-pitch character set is used to print the UPC symbols. When intermixed with a standard 3800 character set, the FDP may be used to create customized forms such as shelf labels, turnaround documents, or any other material where UPC codes are used. The product can be called from a high level language or executed as an independent utility.

Notice GB21-2219 and PDOM SB21-2220.

**ADVANCED TEST MANAGEMENT SYSTEM-II (ATMS-II)  
DOS/VS SUPPORT FOR  
THE IBM OFFICE SYSTEM/6  
5798-CTB**

This FDP provides ATMS-II (5746-XXG) support for the IBM Office System 6 as an input and output device. The IBM Office System 6 provides the ATMS-II user a quiet, high quality ink jet printer, and offline document storage on mag cards and diskette. The FDP will provide the ATMS-II operator with easy-to-use commands including send, receive, queue list, and delete. The FDP will create a new ATMS-II formatter allowing the ATMS-II operator to use most of the document formatting facilities of ATMS-II and properly handle the IBM Office System 6 special codes and Operator Control Language (OCL).

Availability notice GB21-2109, program description/ operations manual SB21-2110, and terminal user's guide SB21-2111.

**DASD SEEK SIMULATOR  
5798-CTD**

This FDP helps solve an OS/VS (MVS, SVS, VS1) installation's performance problems associated with arm movement. It is a tool which can optimize the placement of data sets upon a DASD volume, and members within a PDS, to achieve minimal arm movement. The simulator allows evaluation of various data set placement strategies without moving any data sets. In a simulator run, the user may have the simulator optimize data set placement and/or have the simulator evaluate user specified data set placements. Simulation can be based upon data from a single GTF trace or merged data from a history of traces previously analyzed.

It provides:

- Reduction of time stamp and time adjustment.
- Conversion of UNIT addresses.
- Shared file support.
- Fixed head facility support.

Notice GB21-2217 and PDOM SB21-2218.

**SLSS CONTROL  
5798-CTE**

This FDP is an organizer for IBM SRL libraries. It is a productivity aid and control tool for personnel who have the responsibility to order, maintain, and distribute SRL manuals to local and remote users.

The FDP creates two data sets: The master file for all sets of manuals (libraries) and the detailed file that relates all manuals to the master file.

This FDP is designed for easy use in the batch environment. It creates, adds, changes, and deletes records via control information. In addition, it produces many sorted and group controlled listings for controlling and distributing IBM manuals.

Notice GB21-2222 and PDOM SB21-2223.

**PROGRAM FUNCTION KEY SIMULATOR FOR SPF-II  
5798-CTF**

This FDP provides the capability of using the TSO-3270 Display Support and Structured Programming Facility Version 2 program product (SPF-2) on IBM 3277 Model 2 terminals that do not have 12 program function keys. Prior to the availability of this FDP, SPF-2

required that the IBM 3277 terminal have 12 program function keys. Now, SPF-2 can be used on any IBM 3277 terminal Model 2, regardless of keyboard arrangement.

This FDP may be of value to customers who desire to use SPF (or to enlarge their SPF User-community), but are unable to do so because of the lack of terminals with the 12 program function keys.

Notice GB21-2225 and PDOM SB21-2226.

**VSPC FULL SCREEN EDITOR  
5798-CTG**

This FDP provides the users of VSPC with a full screen editor capability for VSPC data files. It allows multiple line changes, FIND and CHANGE global commands, scrolling with PF Keys, and line repositioning via MOVE and COPY commands. Screen layout, syntax, and use conventions are similar to those of SPF in the TSO environment.

The program is written in APL and requires the VS APL program product (5748-AP1).

Notice GB21-2227, PDOM SB21-2228, and systems guide LB21-2229.

**VTAM CONFIGURATION AND GENERATION AID  
5798-CTL**

This FDP is an installation aid allowing for simplification of the initial generation process for a CICS/DOS/VS, VTAM or ACF/VTAM, and NCP/VS or ACF/NCP/VS system. Based on user input of macro statements defining a VTAM configuration, the aid produces sample DOS/VS input jobstreams and tables tailored to the generation of that particular system. Creation of generation jobstreams for all or a subset of supported products is selectable. The output of this FDP can eliminate much of the time consuming work associated with the generation process. Additionally, via review and modification of the output, it can be useful in the planning and generation of more complex configurations than those directly supported.

Notice GB21-2233, PDOM SB21-2234, and systems guide LB21-2235

**IMS FAST SCAN UTILITY  
5798-CTP**

This FDP is a performance-oriented program designed to retrieve segments from a DL/I HD DB (HIDAM or HDAM) in hierarchical (GET NEXT) sequence and produce multiple output data sets for use by other IMS/VS utilities or user programs. Each output data set can contain a different complement of segments as indicated by a user-specified PSB in conjunction with optional user exits. Three output formats are provided, or the users may elect to handle the output function themselves. The three provided formats and their function are:

HD REORG UNLOAD format which allows the FDP to run as a high speed unload step in the reorganization process.

HSAM format which allows a set of segments to be rapidly extracted from a large data base and then processed by a DL/I batch program.

Variable block format which allows a set of segments to be selected from a data base and then processed by a batch program using OSAM instead of DL/I.

Notice GB21-2230 and PDOM SB21-2231.

**BASIC TELLER SYSTEM - HOST  
5798-CTQ****BASIC TELLER SYSTEM - 3600 FINANCE  
COMMUNICATION CONTROLLER  
5798-CXL**

These FDPs make up an entry level online banking system. Operating under CICS/VS (DOS/VS or VS1), they allow the teller to process DDA, savings, time deposit, and installment and commercial loan

payment transactions using the 3606 Financial Services Terminal and the 3610 Document Printer Model 4.

**Highlights**

- Sign on by magnetic stripe card and security code is required.
- Teller totals are kept for each teller and printed at signoff.
- DDA and savings transactions are verified for sufficient funds.
- Stop payments do not exist because holds and special instructions are available prior to payment.
- During offline operations, transactions are saved for later processing.

Notice GB21-241 and PDOM SB21-2242.

**CORMES DMS/VS DOS/VS INTERFACE  
5798-CTR**

This FDP provides the DMS/VS DOS/VS user with an aid for interfacing with Communications Oriented Message System (CORMES) - 5746-XXM. The FDP is used to generate customized user exit modules for inserting action/trigger messages.

The pregenerated object modules are provided to support invocation of DMS/VS application program by CORMES work on function, and the return from those DMS/VS application programs to CORMES.

The FDP inserts action/trigger messages into CORMES action/trigger files, interfaces to CORMES work on function; thereby, reducing DMS/VS user exit requirements for CORMES functions.

Notice GB21-2244 and PDOM SB21-2245.

**ONLINE STORES INVENTORY ACCOUNTING  
5798-CTT**

This FDP is designed to run under CICS/VS and DMS/VS with DL/I Data Base provided by the Bill of Material System FDP (5798-CLY). This system provides the following functions for an online environment:

- Inquiry into inventory data and location segments to provide detailed stock status display.
- Online updating of inventory data and location segments through inventory transactions (i.e., receipts, issues, and adjustments) with appropriate processing and error checking.
- Allow periodic review of inventory cycle counts and reconciliation of discrepancies.
- Provide details of each inventory transaction from a log file for producing a daily audit report and transaction which may be processed against the order files.

Notice GB21-2236, PDOM SB21-2237, and systems guide LB21-2238.

**VTAM PERFORMANCE ANALYSIS REPORTING SYSTEM  
(VTAMPARS)  
5798-CTW**

This extended support FDP aids the system programmer in optimizing VTAM buffer pools, reducing VTAM storage requirements and improving overall system performance. This program is especially useful during installation for identifying buffer pool shortages for VTAM Level 2 users and optimizing a dynamic buffer allocation scheme for ACF/VTAM users. Periodic execution will aid in maintaining optimum system performance with both VTAM and ACF/VTAM systems.

When used in an appropriate manner, and on a regular basis, VTAMPARS may help to:

- Optimize VTAM buffer pool allocation
- Reduce VTAM's fixed storage requirements
- Reduce VTAM's CSA requirements (MVS)
- Reduce system paging ratio
- Reduce VTAM/application installation time

Notice GB21-2246 and PDOM SB21-2247.

**TPNS LOG FORMAT  
5798-CTX**

This FDP provides a character printout of the TPNS hexadecimal dump and reformats it into a 3270 screen format. It also defines highlighting, cursor positioning, start of message, keys depressed (PF1-12, PA1, PA2, etc.), and other related TPNS information. The program contains a translation table to print all non-printable characters. To minimize print time, it translates characters that are on the customer's print train one time to characters that are on the train multiple times.

Notice GB21-2239 PDOM SB21-2240.

**PLANNING SYSTEM GENERATOR II  
TO PLANCODE CONVERSION AID  
5798-CWB**

This FDP is designed to aid users of PSG II in converting to PLANCODE. Conversion from PSG II to PLANCODE involves three basic conversion efforts: PSG II print specifications, data used by the model, and PSG II model statements. The most tedious and time consuming efforts are the conversion of the print specifications and the data. This FDP is designed to convert the print specifications and data, and simultaneously provide listings to aid in the model statement conversion effort. Through the use of this conversion aid, a business planner may concentrate on converting the logic of the model and employing the advanced capabilities of PLANCODE.

Availability notice GB21-2258 and PDOM SB21-2259.

**CHECK PROCESSING CONTROL SYSTEM (CPCS)  
ONLINE REJECT/RE-ENTRY TESTING AID  
5798-CWE**

This FDP is an aid for testing online reject re-entry routines written for the Check Processing Control System (CPCS). It allows testing or user routines without requiring a CPCS system or 3270 terminals.

The FDP:

- Provides regression test facility
- Simplifies testing of user routines
- Is compatible with IBM 3890 OS/VS Program Testing Aid FDP (5798-CBG)

This product provides the online reject re-entry counterpart of the IBM 3890 OS/VS Program Testing Aid FDP and may use the same input data. The report created by the program will indicate either the number of correct stacker selects or will print the document image, the expected pocket select, and the actual pocket select for all input records processed.

Notice GB21-2264 and PDOM SB21-2265.

**IMS/VS TIME INITIATED INPUT FACILITY  
5798-CWF**

This FDP provides the IMS/VS customer with the capability of programmed entry of IMS transactions, message switches, or operator commands based upon time of day or initial startup of IMS.

Availability notice GB21-2255 and PDOM SB21-2256.

**IBM 3650 STORE PRODUCED ACCOUNTING  
REPORT CUSTOMIZER  
5798-CWG**

The FDP is designed to accept user processing and report definition in an easy-to-use format. The system then generates a customized transaction log processing program. The system also produces a 3653 interactive program to print each custom report requested by the user. The system may be run either concurrently with the sales function or overnight in a batch mode with reports printed the next day. This system allows the user to easily do distributed processing of information captured by the 3650 Retail Store System.

Availability notice GB21-2273, PDOM SB21-2274, and system guide LB21-2275.

**IBM 3770 SUPERVISOR ASSEMBLER  
5798-CWH**

This FDP provides a symbolic language and associated assembler code for the 3770 programmable terminal.

The FDP will decode and validate the input data, build a table of addresses, and generate text cards. Significant features of the assembler include:

- Symbolic addressing and definition of data areas.
- Assembly and symbolic linkage of multiple supervisor programs in a single pass.
- A cross-reference listing of source and object code.

Availability notice GB21-2278 and PDOM SB21-2279.

**COPICS SHOP ORDER RELEASE  
5798-CWJ**

The COPICS Shop Order Release application program is a tool for opening and releasing shop orders to the production facility. The process of opening and releasing a shop order is driven by the planned orders developed in the COPICS Advanced Function MRP application

program (5785-GAF). The AF MRP application program is prerequisite to COPICS Shop Order Release.

The program automatically communicates unplanned shop order transactions to Advanced Function MRP (5785-GAF) to replan the affected items in the next selective replanning run.

Notice GB21-2281 and PDOM SB21-2282.

**TREND ANALYSIS/370 UNDER CICS/VS  
5798-CWQ**

This FDP allows the Trend Analysis/370 program product (5740-F12) and the System/7 Color Graphics Support feature (5707-F12) to run under CICS/VS. It is an enhancement to IBM's growing line of interactive, data handling products and is an easy-to-use information handling and maintenance tool which allows the user to display information based on organization, time, or item of interest in tabular report form on the 3270 Information Display System. It is designed to be adaptable to user needs, allowing flexibility of menu-design, report creation, and data entry. Using the System/7 Color Graphics Support feature, presentation can be done graphically on a color television monitor. Time series numerical information from either an internal organization or external environment can be formatted, stored, and maintained by the system.

Availability notice GB21-2299, operations guide SB21-2270, program reference manual SB21-2300, program logic manual LB21-2301.

**IBM 3890 ONLINE FINE SORT - DOS/VS  
5798-CWR**

This FDP is designed to improve fine sort productivity by eliminating one or more document passes per run and by processing multiple banks and related control documents in a single run, resulting in reduced setup and handling. Sorting is achieved by host program communication with 3890 SCI using pocket assignments calculated at the host.

Facilities of this FDP include radix sorting (number compression by assigning an alias and base number conversion of the alias), image matching, multiple sort specifications per run, high volume account kill, divider insertion, processing of on-us tracers and bank control documents, operator communication via CRTs, restart, high volume accounts report, and sort statistics report.

Notice GB21-2276 and PDOM SB21-2277.

**THE 3800 FORMS UTILITY  
5798-CWW**

This FDP eases and speeds the process of designing and implementing new or converting existing reports and formatted listings from an impact printer to the 3800 Printing Subsystem. The user is given flexibility in specifying the kind of formatting operations desired through use of control statements to describe an input file and direct the formatting for the output file.

Once the desired format has been achieved, this FDP provides a significant assist to the user by generating source code which is suitable for inclusion in a system assembler. ANS COBOL, or PL/I Optimizer program. Instructions or statements generated provide procedural code which may be used to achieve results similar to those provided when using the formatting program itself.

Notice GB21-2287 and PDOM SB21-2288.

**GRAPHIC ONE-LINE DIAGRAM DISPLAY  
5798-CWX**

This FDP uses electric utility transmission system data provided by two of the industry's widely used network modeling programs (load flows). The program automatically draws one-line diagrams on a graphic display station attached to a 3277 display via the 3277 Graphics Display Attachment RPQ. Utility planning engineers, operation engineers, and other users can interactively modify and display data for network modeling. Several menus and a powerful query command language facilitate these functions. The one-line network diagram can be windowed and scaled, and the associated network data can be deleted, added, or changed by use of a joystick cursor control or alphanumeric keyboard. Once modified, the diagram and data are provided by the FDP to the utility's load flow program. Utility network modeling is a prime means by which electric utilities perform high voltage transmission system network expansion planning and daily operations planning. These applications are now done principally using batch programs. Used in conjunction with a utility's load flow program, this FDP can potentially provide significant productivity improvements for utility engineers.

This program is designed for use with the 3277 Graphics Attachment (RPQ 7H0284) and the 3277 Graphics Attachment Support program (RPQ 5799-AXX).

Availability notice G320-6059, PDOM SH20-2087, and systems guide LY20-2366.

**IMS/VS 3790 OUTBOARD FORMATTER (OBF)  
3790 PROGRAM  
5798-CWY****IMS/VS HOST PROGRAM  
5798-CRD**

These extended support FDP's can help 3790 users reduce the transmission cost for remote 3790 Communication Systems with attached 3270's that communicate with IMS/VS through Message Format Services (MFS).

IMS/VS 3790 Outboard Formatter consists of two parts:

- A Host System/370 language conversion program
- A 3790 Monitor program.

The Language conversion program accepts IMS/VS MFS source statements and generates 3790 panel definitions as well as new MFS source statements (without literals).

The 3790 monitor program accepts IMS data streams and merges panels for display on 3270's. The monitor also includes user exits to support user-written 3790 application code.

Notice GB21-2173 and PDOM SB21-2174.

**IBM 3276/3278 OPERATOR TRAINING  
5798-CWZ**

This FDP is a course which will instruct operators on how to use the 3276 and 3278 terminals. Where possible, the student learns the functions of the terminal by actually performing each function. The course material includes an introduction to the terminal, how to turn

the terminal on and off and make adjustments for brightness and contrast, recognizing the indicators in the operator information area, using the problem determination guide, using all the standard keys on the keyboard, and using the optional features. This FDP will run under either the Interactive Training System or the Interactive Instructional System.

Notice GB21-2290, CD/AM SB21-2291, and student materials SB21-2292.

**CICS/VS MAPS CONVERSION TO 3790 PANELS  
5798-CXB**

This FDP provides for the conversion of CICS/VS Maps to 3790 panels. This is accomplished by reassembling the CICS/VS Maps using the Assembler macro library provided by the FDP. Three output options are available. They are generation of native 3790 source code ... generation of DMS/3790 skeleton input, providing the DMS/3790 code necessary for panel creation ... direct conversion to 3790 object code.

This product is designed to reduce the time needed to migrate an existing CICS/VS application to a 3790. In most cases, even though the application implementation changes from a purely host-resident one to a distributed approach, it is desirable to minimize disruption of the user interface, i.e., the screen layouts. This product reduces the work required to generate 3790 panels that are identical in layout to CICS/VS maps. This FDP is designed for any CICS/VS user who has 3790s planned or installed.

Notice GB21-2308 and PDOM SB21-2309.

**ROUTING-TRANSIT CHECK DIGIT  
5798-CXD**

This FDP provides the facility to handle the changes in the standards for MICR encoding of checks which are effective July 1, 1978. Virtually every user of MICR reader/sorter equipment must make changes to process checks encoded with the new format. The Routing-Transit Check Digit FDP provides a series of routines which can assist in making these changes. Included are routines to convert new format items to the old format, to perform modulus self-checking, to regenerate single digit errors, and to calculate the appropriate check digit for a given routing-transit code. Routines are included for users of IBM 1255 and IBM 1419/2956 reader/sorters (attached to a System/360 or System/370) and for users of the IBM 3890 Document Processor.

Notice GB21-2317 and PDOM SB21-2318

**THE 3800 REPORT FORMAT AND SEGMENTATION PROGRAM  
5798-CXF**

This FDP splits a single report into mini-reports ... extracts and prints totals ... reformats reports ... without application program changes.

The FDP divides a report into individual mini-reports. Using the features of the 3800, each mini-report can be individually printed and addressed with a different number of copies per mini-report.

Conversion to smaller size forms with less print space is accomplished by reducing the number of lines per page and characters per line - an option of this FDP. Headings and page counts will be appropriately maintained.

Notice GB21-2314, PDOM SB21-2315, and systems guide LB21-2316.

**INVENTORY FORECASTING AND REPLENISHMENT MODULES -  
ALLOCATION  
5798-CXG**

This FDP is designed to be used in conjunction with the Inventory Forecasting and Replenishment Modules FDP 5798-CFH. It is designed to be used in either a replenishment (PULL) or redistribution (PUSH) mode. It uses the technique of variable interval time allocation to generate an order for a group of items so that uniform time supplies are ordered. In addition, it ensures that user-defined weight (pounds, cube, dollars, etc.) constraints are met.

Notice GB21-2323, PDOM SB21-2324, and systems guide LB21-2325.

**COPICS ROUTING DATA CONTROL  
5798-CXE**

The COPICS Routing Data Control application program organizes information defining an item's manufacturing process (routing) within a COPICS data base architecture. The routing information can subsequently be used in cost planning, shop order release, and shop order tracking systems. This package is written in DMS/VS.

Notice GB21-2311 and PDOM SB21-2312.

**SNA/RJE PRINT OUTPUT ANALYSIS  
5798-CXH**

This FDP will analyze data and/or reports to be transmitted with SNA/RJE systems, determine the most efficient compaction character set to be used with SNA compaction, and project the reduction in character transmission compared to BSC compression.

Notice GB21-2326 and PDOM SB21-2327.

**BTS - TPNS  
5798-CXJ**

This FDP is a program that generates scripts for the Teleprocessing Network Simulator (TPNS) program product (5740-XT4) from input decks created for the Batch Terminal Simulator (BTSII). A BTSII input deck consisting of commands and 3270 simulator statements is converted to an equivalent TPNS Advanced Language message deck. This FDP will also function using input decks from BTSVS with the 3270 format feature.

Notice GB21-2328 and PDOM SB21-2329.

**HDAM SEQUENTIAL RANDOMIZER GENERATOR EXTENSIONS  
5798-CXN**

This FDP generates a randomizer which has the capability of placing keys of an IMS/VS HDAM data base into collating sequence. It is an extension to IMS/VS Sequential Randomizer Generator FDP 5798-CQG, which is a prerequisite. The enhancements allow the generation of randomizers that utilize less storage due to the implementation of advanced compression techniques. Improved handling of large irregular key sets, key analysis routines, and zone sequential randomizer generation are provided.

This FDP will analyze data and/or reports to be transmitted with SNA/RJE systems, determine the most efficient compaction character set to be used with SNA compaction, and project the reduction in character transmission compared to BSC compression.

Notice GB21-2326 and PDOM SB21-2327.

**FINANCIAL PLANNING SYSTEM - TSO  
5798-CXP**

This FDP will be useful to the financial analyst who needs to obtain printed financial reports with quick turnaround. Functions provided are:

- Interactive design of financial reports
- Terminal data entry and editing
- Interactive definition of financial calculations to be performed, including APL code and/or any of the financial, arithmetic, and forecasting routines of FPS
- Execution of the financial algorithms which the user has defined
- Printing of the financial report
- Consolidation of financial reports (e.g., produce a corporate report by consolidating divisional data)

This FDP is designed to operate with the VS APL for TSO IUP (5796-ALB).

Notice GB21-2325, PDOM SB21-2336, and systems guide LB21-2337.

**OS/VS DATA SET EDITOR  
5798-CXQ**

This FDP is a productivity aid designed to help reduce the time and effort required to modify data sets or members that result from hardware and/or software changes.

The program provides the user with editing capability for sequential data sets and libraries. It can process the library as a single entity or by selecting members.

Notice GB21-2350 and PDOM SB21-2351.

**POWER/VS IBM 3777-2 WORKSTATION PROGRAM  
5798-CXR**

This FDP, written in Assembler, provides the necessary programming support to allow the IBM 3777 Communication Terminal Model 2 to function in a DOS/VS POWER/VS Remote Job Entry environment. The IBM 3777-2 is supported as the IBM 3780 Communication Terminal and requires no modification to POWER/VS.

All I/O features of the IBM 3777-2 are supported including card transmission, diskette transmission (80-byte records or less), printed output, and punched card output. When the Console Display feature is installed, all POWER/VS messages appear on the display instead of the printer. POWER/VS remote operator commands may be entered from the keyboard without the remote operator command identifier ('\*..').

Notice GB21-2338 and PDOM SB21-2339.

**IMS FAST REORGANIZATION RELOAD  
5798-CXT**

This FDP is designed to rapidly reload an IMS/VS data base. It uses as input the unloaded data set produced by the IMS Fast Scan Utility FDP 5798-CTP or the IMS HD Reorganization Unload Utility (5740-XX2). It produces a data base that is IMS/VS Version 1 compatible, but does not utilize IMS/VS facilities. The program operates as a non-DL/1 batch job under OS/VS.

This product is designed to reduce the time required to reorganize HD-type data bases. It also generates data set, segment, and segment pointer statistics that may be a valuable data base tuning aid. Although this FDP is particularly applicable to large data base users, it offers performance improvements to most IMS/VS DL/1 users. Faster reorganization should allow more frequent data base organization, thus enhancing the performance of jobs accessing the data base. Faster reorganization also means the data base is unavailable to the online IMS control region for a shorter period of time.

Notice GB21-2341 and PDOM SB21-2342.

**PRINT LOAD ANALYZER  
5798-CXY**

This FDP is designed to allow users to create an accurate picture of their printing environment. It totals the print volumes by job name, system, job origin, printer, or form. This FDP can be used as an audit tool to measure forms usage and is useful in the following circumstances:

- User is evaluating 3800 Subsystem
- User is evaluating remote printing requirements
- Multiple local and/or remote printers in use
- Multiple system environment
- User needs to control and track forms used by processor, remote ID, and/or job ID

Notice GB21-2355 and PDOM SB21-2356.

**VM/CMS LIBRARY MAINTENANCE AND SPMOL-II SIMULATOR  
5798-CYA**

This FDP is made up of two major functions, either of which may be implemented independently of the other. The Library Maintenance Function controls a central library which is kept in compressed format and is protected against multiple updates. Programs are never directly updated unless a new version or modification is created. Original sequence numbers will be maintained and all changes are applied temporarily when a program is compiled. This gives the user a good audit trail and an easy method of backing out changes. The second

function is a simulator of most of the SPMOL edit commands which allows the programmer to use program sequence numbers or relative line numbers within a screen to make changes. This FDP should ease the transition for users moving from SPMOL-II to VM/CMS.

This FDP runs under VM/CMS and requires the Display Editing System for CMS IUP (5796-PJP).

Notice GB21-2361 and PDOM SB21-2362.

**TSO/JES2 BATCH DISPLAY FACILITY  
5798-CYE**

This FDP will allow TSO users on an MVS/JES 2 system to receive enhanced status information about batch jobs in the JES2 system. This information, which a TSO user can receive at a terminal, will be equivalent to the following JES2 commands:

\$DA,JOBS; \$DA,TSU; \$DQ; \$DN,Q=XEQa (where a=A...Z,\$,@  
\$DF; \$DJ; \$D'

In addition, if a TSO user has OPERATOR authorization, any JES2 command may be entered via the TSO terminal.

Notice GB21-2373 and PDOM SB21-2374.

**RACF PRODUCTIVITY AID  
5798-CYF**

This FDP is a step-by-step guide to converting an organization to the full use of RACF with minimum disruption to the existing users of the system.

Notice GB21-2370 and PDOM SB21-2371

**SYSTEM/370 APPLICATION-WIDE COBOL  
DATA-NAME CROSS REFERENCE  
5798-CYG FOR DOS/VS  
5798-CXW FOR OS/VS**

These FDPs are programmer aids for debugging, changing, maintaining, or converting a multi-program COBOL application. The report produced gives a single cross-reference report for multiple programs and displays the program and source statement for each occurrence of each data name. It helps the programmer identify names that are currently in use, identify the attributes of any name, and locate all occurrences of any name in the application.

The programs will accept both IBM and non-IBM source COBOL, and optionally will cross-reference COBOL reserved words, making these FDPs valuable tools in program conversion by identifying all uses of each non-standard word.

Notice GB21-2344 and PDOMs, SB21-2345 (CXW) and SB21-2378(CYG).

**AUTOMATIC TCAM NETWORK DEFINITION  
5798-CYH**

This FDP will allow a user of either a TCAM/NCP or TCAM/PEP network to define the network resources in one place, i.e., the NCP or PEP source. That information will then be automatically propagated to the TCAM source, eliminating the need for duplication of effort in coding the network definitions into both control programs (host and controller).

Any change required in TCAM as a result of alterations to the network will come about as a by-product of the NCP or PEP source modification. If the network is accessed through more than one communication controller (local or remote), the TCAM network definition will be generated from all NCP or PEP sources in unison. If the multiple system networking facility is being used, a network resource defined in one NCP source can be included in the TCAM network definitions for any hosts that are specified.

Notice GB21-2375 and PDOM SB21-2376.

**DL/1 FAST SCAN UTILITY DOS/VS  
5798-CYJ**

This FDP is a DOS/VS version of the IMS Fast Scan Utility FDP (5798-CTP). It is designed to rapidly read a selected HIDAM or HDAM physical data base in hierarchical (GET NEXT) sequence and produce multiple output data sets for subsequent use by other DL/1 utilities (HD REORG RELOAD) or user programs. Optionally, through the use of user exits, the FDP may be used as a high-speed retrieve module to directly process the data base segments. The extensive data base statistics produced can be used to monitor the record fragmentation and, therefore, the need to reorganize the data base.

Notice GB21-2380 and PDOM SB21-2381.

**IBM 3630/3600 BULK DATA TRANSFER  
5798-CYK**

This FDP is an IBM 3630/3600 application program that provides the user with a powerful and flexible method for sending/receiving sequential files to/from System/370 hosts. Written as a standalone program, it requires no work station terminal, is quickly installed, and may accelerate the installation cycle of an IBM 3630/3600 system. This FDP has been designed to operate with the System/370 host program for IBM 3630/3600 Bulk Data Transfer FDP (5798-CYL) or any equivalent host program.

Notice GB21-2385 and PDOM SB21-2386.

**SYSTEM/370 HOST PROGRAM FOR 3630/3600  
BULK DATA TRANSFER  
5798-CYL**

This FDP is a System/370 host program for use with the above FDP (5798-CYK) or equivalent. It is a batch VTAM application program that provides the user with a powerful and flexible method for sending/receiving sequential files to/from remote IBM 3630/3600 work stations. Written as a standalone program, it can be quickly installed and may accelerate the installation cycle of an IBM 3630/3600 system.

Notice GB21-2388 and PDOM SB21-2389

**3760 BATCH TRANSFER PROGRAM INSTALLATION AID  
5798-CYN**

This FDP provides an exit program for the 3760/3790 Batch Transfer Program (BTP) which extends its capabilities and eases the installation of the 3760/3790 Data Entry System under DOS/VS.

Notice GB21-2383 and PDOM SB21-2384.

**COBOL PAYROLL MANAGEMENT SYSTEM  
5798-CYP**

This FDP includes the basic payroll functions of wage and tax calculation, quarterly 941s, year-end W-2s, personnel reporting, and union and workmen's compensation reporting. This set of programs will provide the small system customer with comprehensive management reporting and strict audit controls.

Notice GB21-2399 and PDOM SB21-2400.

**EXTENDED AUTHOR TRAINING FOR  
INTERACTIVE INSTRUCTIONAL SYSTEM  
5798-CYQ**

This FDP is an extension of the Interactive Instructional System Author Training Course FDP (5798-CEB). It is designed to teach course authors how to use the special facilities available under the Interactive Instructional System.

Notice GB21-2402, CDAM SB21-2403, and student materials SB21-2404

**VIRTUAL STORAGE ACCESS METHOD  
(VSAM) OPERATIONS UTILITY  
5798-CYR**

This FDP helps manage the utilization, relocation, and reorganization of VSAM files, data spaces, and catalogs. The utility retrieves information contained in the VSAM catalogs and produces VSAM access method services (IDCAMS) jobstreams to back-up or reorganize the requested object (cluster, space, user catalog, master catalog).

A powerful set of run time options allow the operations or systems programming staff a wide range of flexibility in manipulating VSAM objects.

Notice GB21-2393 and PDOM SB21-2394

**ISAM-DL/1 BRIDGE  
5798-CYT**

This FDP is an execution time interface between DL/1 and an ISAM application program. Data in a DL/1 data base may be accessed by DL/1 or ISAM programs. No modification to source programs, recompilation, or re-link editing will be required. Application programs will run under the Bridge program, and all languages which support ISAM or DL/1 are supported, as the bridging is done at execution time. Hierarchical data bases are supported. Field sizes in both the ISAM file image and the DL/1 data base must be identical.

Notice GB21-2396 and PDOM SB21-2397.

**ENTRY TIME SHARING SYSTEM II (ETSS/II)  
PROGRAMMING AID  
5798-CYY**

This FDP consists of a series of programs and functions designed to aid the ETSS/II user in job stream creation, use of access method services, creation of DL/I data base definitions, and other related functions.

Notice GB21-2408 and PDOM SB21-2409.

**ETSS-II BATCH LIBRARY INTERFACE TO POWER/VS  
5798-CYZ**

This FDP will allow members in the ETSS-II library file to be inserted logically in normal DOS/VS batch job streams. ETSS-II library members may be logically inserted into batch job streams in a manner similar to the existing SLI (Source Library Inclusion) facility of POWER/VS.

ETSS-II users with this product may now make the ETSS-II library file the focal point of their entire DOS/VS installation.

The user may include ETSS-II library file members into a standard DOS/VS batch job stream simply by specifying the name of the member on a standard POWER/VS SLI control card.

Notice GB21-2411 and PDOM SB21-2412.

**SYSTEM/370 ANS COBOL CONVERSION  
AID FOR NCR NEAT/3  
5798-CZC**

The FDP is designed to aid in the conversion of NCR NEAT/3 source programs into System/370 ANS COBOL programs. In addition, the program converts selected file specifications and input/output statements to VSAM processing. This FDP is based on the System/3 COBOL Conversion Aid for NCR NEAT/3 (5798-AYA).

Notice GB21-2420 and PDOM SB21-2421.

**SYSTEM/3 TO SYSTEM/370 NUMERIC FIELD EDIT  
AND REPLACEMENT  
5798-CZD**

This FDP was designed to assist System/3 users in editing and correcting data files when moving to a DOS/VS or DOS/VSE system. However, this FDP can be used in other environments where the user wishes to check the validity of numeric fields. The program will print errors along with the corrective action taken. The corrective action to be taken is specified by the user by field. A corrected output file may be written at the user's option.

Notice GB21-2423 and PDOM SB21-2424.

**IBM 8100/DPCX 3790 DISTRIBUTED  
ENTRY/QUERY SYSTEM  
5798-CZE**

This FDP provides end-users with many basic data processing functions on the IBM 8100/DPCX or the IBM 3790 remotely and independently from a S/370 host. The functions include key entry, verification, query, record selection, sorting, reporting and utilities. The system is designed to generate and maintain local data files and reports to support daily operational needs.

Notice GB21-2431 and PDOM SB21-2432.

**COPICS INVENTORY PLANNING AND FORECASTING  
5798-CZF**

The COPICS Inventory Planning and Forecasting application program provides an inventory management technique for inventory items. The application program is useful for analyzing demand, forecasting sales, establishing order quantities, setting reorder points, and calculating safety stock for independent demand items.

The program communicates changes in safety stock or order quantity to the Advanced Function Material Requirements Planning application program (5785-GAF) to replan items in the next selective replanning run.

Notice GB21-2426 and PDOM SB21-2427.

**CHARACTER EXTENSIONS FOR 3800  
5798-CZG**

This FDP provides the scan patterns for new text printing characters for the IBM 3800 Printing Subsystem in the form of IEBIMAGE utility data statements. Any group of characters can be installed in the user's system by processing the data statements from that group using standard JCL with IEBIMAGE then stores them in SYS1.IMAGELIB as graphic character modification modules. The user can build, modify, and name character arrangement tables with IEBIMAGE to include the graphic character modification and thus make them accessible for printing.

Notice GB21-2429 and PDOM SB21-2430.

**COPICS FACILITIES DATA CONTROL  
5798-CZH**

The COPICS Facilities Data Control application program is a tool for capturing plant resource data within a data base architecture. This data can subsequently be used in planning systems for effective utilization of the available plant resources.

Notice GB21-2433 and PDOM SB21-2434.

**IBM 3650 SIMULTANEOUS PRINTING OF OBSERVED TRANSACTIONS  
5798-CZK**

This FDP provides the 3650 user with a flexible facility for terminal monitoring.

The FDP is written in 3650 SPPS Assembler and runs under the control of DOS/VS and the 3650 Retail Store System (RSS) host support.

Notice GB21-2469, PDOM SB21-2470, and Systems Guide LB21-2471.

**IBM 3790 DATA ENTRY PROGRAM FOR MASTERCHARGE  
AND VISA MERCHANT SALES DRAFTS  
5798 - CZL**

This FDP provides full function editing and validation of the data required for processing merchant deposits of both MASTERCHARGE and VISA sales transactions. A control function is provided for automated monitoring of the status of batches of work in process as well as operator statistics. A separate balancing program permits modification of entered data as well as insertion and deletion to achieve a balanced condition prior to host transmission.

All panels contain operator prompting, initialization of static fields, and full screen editing and correction capabilities. Validation and editing of entered data are consistent with industry requirements and the standards required for communication between card processing associations.

Notice GB21-2453 and PDOM SB21-2454

**IBM 3790 INTERACTIVE FILE MAINTENANCE  
5798-CZQ**

This FDP is an IBM 3790 application development productivity aid which consists of six full screen panels and four generalized, application independent programs distributed on a Batch Data Exchange Diskette. It is capable of storing end-user definitions of indexed and relative data sets and providing, based upon these definitions, the record maintenance functions of adding, deleting, changing, and inquiring.

An optional audit trail of additions, changes, and deletions can be printed. It is also possible to automatically record in the record the ID of the operator entering or last changing the record, and the date and time the function was performed.

Advanced capabilities provide multiple views of a record and a vertical multiple sector support.

The functions provided by this FDP can save a great deal of the programming effort typically expended in the development of a new application.

Notice GB21-2476 and PDOM SB21-2477

**NETWORK PERFORMANCE ANALYZER  
HOST ... 5798-CZR  
CONTROLLER ... 5798-CZT**

The Network Performance Analyzer (NPA) collects communications network operating data for analysis.

NPA data may be helpful in highlighting the causes of performance degradation, such as excessive traffic at certain periods, or insufficient line capacity. It may also aid in isolating performance problems induced by high line or cluster error rates caused by temporary errors or wide fluctuations in message rates.

With NPA data, networks may be tuned for greater efficiency and potentially improved response times. Elements such as polling rates, network parameters, and line loading may be modified and performance improved. Tuning may also free up capacity.

NPA consists of a host application program and one or more modified NCP programs. It runs under VS1 or MVS, with VTAM and/or TCAM. NPA can coexist with subsystems such as CICS, IMS, or TSO, but operates independently of them.

Notice GB21-2478 and PDOM SB21-2479.

**INSTALLATION MANAGEMENT DOCUMENTATION AID  
5798-CZW**

This FDP is an installation planning and operations management tool, particularly useful in a large complex DP environment. Its functions include creation and maintenance of the following:

- Computer room layouts (Note: IF AN IBM 3800 is available, these are drawn to the same scale as IBM-provided equipment templates)
- CPU to channel to control unit cable diagrams
- Subsystem cabling diagrams (DASD, TAPE, 2914)

This FDP is parameter driven and may be executed under TSO or in batch.

Notice GB21-2481 and PDOM SB21-2482.

#### **FORMAT/3800 II 5798-DAC**

This FDP is a productivity aid for producing "pre-printed" or "formatted" forms for use on an IBM 3800 Printing Subsystem. FORMAT/3800 II includes the same functions as FORMAT/3800, 5798-CPN, and provides the user with a quick and simple method of preparing "formatted" forms using the FORMAT character set.

In addition, it generates online or offline syntax and allows "free-text" input in either character or hexadecimal form. As options, it has the ability to: optimize generated COPYMOD statements for any line where there is no user data; optimize "free-text" input even if the free text data contains blanks; produce COPYMOD statements with syntax as required for the IBM 3800 OFFLINE utility; produce an OPTION OVERRUN card for any specified lines per inch or not produce an OPTION card.

Notice GB21-2496 and PDOM SB21-2497.

#### **IBM 8100/DPCX 3790 SORT/MERGE PROGRAM 5798-DAF**

This FDP provides IBM 8100/DPCX and 3790 customers with a general purpose sort/merge capability which provides performance capability sufficient to permit its use in interactive applications. It may be called from either a full screen operator interface program that is provided or from a user program. The FDP will sort tags of any length between 2 and 128 bytes into ascending or descending order.

A subprogram is provided which can build a tag data set from a relative data set or an indexed data set based on up to 16 user-specified fields from each input record. Another subprogram provides the capability to resequence the original input records. For typical sorts, this sort is from 5 to 20 times as fast as the previously available 3790 sort.

A separate license is required for each IBM 3791 or IBM 8100/DPCX controller.

Notice GB21-2501 and PDOM SB21-2502.

#### **STORAGE TUBE AND PLOTTER SIMULATOR FOR THE IBM 3277 GRAPHICS ATTACHMENT 5798-DAG**

This FDP is a set of FORTRAN routines that allows existing customer application programs written for a Tektronix Storage Tube or Calcomp plotter to execute on the IBM 3277 Display Station with the graphics attachment RPQ 7H0284 and the PRPQ 5799-AXX. These FORTRAN routines replace routines of the same names in the Tektronix 'Plot 10' or Calcomp 'Plot R' software packages for execution with the IBM 3277 Display Station with the graphics attachment. The FDP gives the user the ability to generate a graphic image rapidly and provides a dual-screen facility: one, graphic; the other, alphanumeric.

- Registered Trademark of the Tektronix Corporation
- Registered Trademark of the California Computer Corporation

Notice GB21-2503, PDOM SB21-2504, and Systems Guide LB21-2505.

#### **IBM 3630 PLANT MONITORING AND CONTROL TRANSACTION DRIVER 5798-DAH**

This FDP is an IBM 3631/3632 application program that provides an easy method for capturing shop floor activity. The program provides an efficient, modularized, table-driven structure which may accelerate the installation cycle, simplify customization, and ease expansion of online shop floor applications. The FDP has been designed to operate with CICS/VS.

Notice GB21-2506 and PDOM SB21-2507.

#### **IBM 3650 PHARMACY APPLICATION/CENTRAL ENVIRONMENT 5798-DAK**

This FDP provides support at the user's host site for the operation of pharmacies at remote locations using the IBM 3650 Programmable Store System Pharmacy Application/Store Environment program product (5735-H11).

This FDP has been designed and tested with the IBM Advanced Data Communication for Stores program product, (5735-XR2).

Notice GB21-2513 and PDOM SB21-2514.

#### **SYSTEM LOG DISPLAY AND SEARCH FACILITY 5798-DAL**

This FDP is a systems management aid for controlling and analyzing the operation of an MVS/JES2 system. It can improve the productivity of operations, scheduling, control, and systems programming personnel by providing much needed operational information. In many cases, problem-determination time may be significantly reduced through the use of this FDP.

Information is provided in four displays: System Log (SYSLOG), which allows the user to dynamically display (SCHROLL) all MVS SYSLOG data sets; Display Active; Input Queue; and Output Queue. Much of the information provided by these displays previously had been unavailable or hard to obtain. Information is displayed on IBM 3270 display stations with 24, 32, or 43 lines. This FDP will run either as a menu option to the TSO 3270 Display Support and Structured Programming Facility (SPF/TSO) program product (5740-XT8 Version 2.1 or 2.2), or as a TSO command processor. The display formats and command syntax of this FDP are similar to that of SPF/TSO.

Notice GB21-2511 and PDOM SB21-2512.

#### **ACCOUNT NETWORK MANAGEMENT PROGRAMS CICS/OS/VS ... 5798-DAQ CICS/DOS/VS ... 5798-DAT**

These FDPs are specifically designed to automate the core elements of system management with an integrated set of interactive application programs and batch report programs as follows:

The problem management application provides preformatted screens to ensure consistent problem reporting, assignment, and resolution of system or network incidents.

The change management application provides preformatted screens to enable planned, coordinated change activities including: equipment installation or relocation; new application programs; PUT and engineering changes; and feature changes.

The network configuration application provides an on-line data base of network components, and the ability to create, update, and display records containing component details.

Notice GB21-2521, reference card SB21-2546, PDOM SB21-2522 for 5798-DAQ, and PDOM SB21-2524 for 5798-DAT.

#### **NETWORK ERROR MANAGEMENT FACILITY 5798-DAW**

This FDP enables the user to perform problem determination of incidents on communications networks in the OS/VS and DOS/VS operating environments. The design of this FDP permits a structured approach to problem determination through a hierarchical display of error information for each of the operating modes beginning with all errors summarized by each attached resource. Successive iterations lead quickly to the failing component, whereupon the detailed data of the error event and the probable cause are available.

Notice GB21-2527, PDOM SB21-2526 for OS/VS, and PDOM SB21-2528 for DOS/VS.

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